

EXT: Nagios TYPO3 Monitoring

Extension Key: nagios

Language: en

Keywords: forAdmins, forIntermediates

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The content of this document is related to TYPO3 - a GNU/GPL CMS/Framework available from <http://typo3.org>

Nagios® was originally developed by Ethan Galstad and is licensed under the GNU GPL V2.

No parts or components of Nagios® are used in the TYPO3 extension described in this document. However, this extension makes no sense without a Nagios® server (and the "check_typo3" plugin) which retrieves the information generated by the extension, interprets the data and reacts appropriately.

Read more about Nagios® and its license at <http://www.nagios.org>

The Nagios® TYPO3 Monitoring extension (extension key: nagios) and the Nagios® plugin were developed by Michael Schams.

It is highly recommended to check for updates (documentation as well as the TYPO3 extension and the Nagios® plugin) at the official web site at <http://schams.net/nagios>.

This documentation applies to version 1.2.4 of the Nagios® TYPO3 Monitoring extension.

Many thanks to Simon at Cerebrum for his support in creating the manuals, Tim for testing the extension, Christian for his contribution to support eID since version 1.2.0 and Markus for his work in regards to the "disk usage check".

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Introduction

What Does It Do?

The TYPO3 Nagios® Extension gathers some information about the TYPO3 system and provides these details to a Nagios® server for further processing. The Nagios® server parses and analyses the data and may react appropriately according to its configuration. Both parts (the Nagios® server and the TYPO3 extension) build a system that enables system administrators to monitor a large number of TYPO3 servers and notifies administrators about a suspicious condition of one or more TYPO3 instances.

A typical use case for Nagios® and this TYPO3 extension is to monitor a server farm with dozens of TYPO3 servers and to ensure the infrastructure is up-to-date and in a secure and "healthy" condition.

It is important to understand that this documentation covers the TYPO3 extension only. The counterpart (the Nagios® server and the "check_typo3" plugin) is not part of this documentation. You find further installation and configuration instruction on the web site at <http://schams.net/nagios>.

Detailed Overview

Nagios® is the de-facto standard of open source network and server monitoring. It is a powerful monitoring system that enables organizations to identify and resolve IT infrastructure problems before they affect critical business processes. A professional hosting infrastructure includes one or more monitoring instances in order to check if the network, the servers and the services are all up and running and in working order. A Nagios® server monitors those things and notifies system administrators if a suspicious condition or a fatal error (e.g. service response too slow, server not reachable, maybe down?) occurs.

Nagios® comes with a comprehensive set of checks off the shelf including PING (server alive), disk space, server load, free memory, etc. (on a server level) but also SMTP, SSH, HTTP response, etc. (on a service/application level). Apart of those basic checks Nagios® allows system administrators to implement and configure their own checks.

The TYPO3 Nagios® Extension in combination with the TYPO3 check plugin for Nagios® ("check_typo3") enables system administrators to gather information from a TYPO3 system and to react if the web instance reports a specific condition.

In a practical sense this means system managers can be warned if a TYPO3 server runs with a specific (e.g. outdated) version of TYPO3 (or PHP) or TYPO3's deprecation logging is enabled (and the log file fills up the disk space on a production server) or (a very simple but maybe the most used scenario) the TYPO3 server is not responding (unable to report anything) at all.

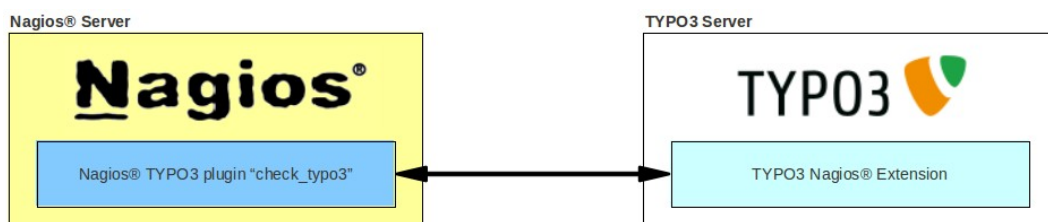
The Nagios® server is optimized for running on a Linux/UNIX server but is able to monitor all kinds of servers, services and network devices (e.g. Windows/Mac/Linux/UNIX machines, Netware servers, routers/switches, network printers and publicly available services such as HTTP, FTP, SSH, etc.).

Read more about Nagios® and monitoring strategies at the following sites.

- the official Nagios® web site: <http://www.nagios.org>
- Nagios® at Wikipedia (English): <http://en.wikipedia.org/wiki/Nagios>
- Overview of Network Monitoring Systems:
http://en.wikipedia.org/wiki/Comparison_of_network_monitoring_systems

Who is Who in the Jungle?

It is easy to lose track of the terminology used in this documentation, so the following image clarifies the components involved in the monitoring system (simplified).

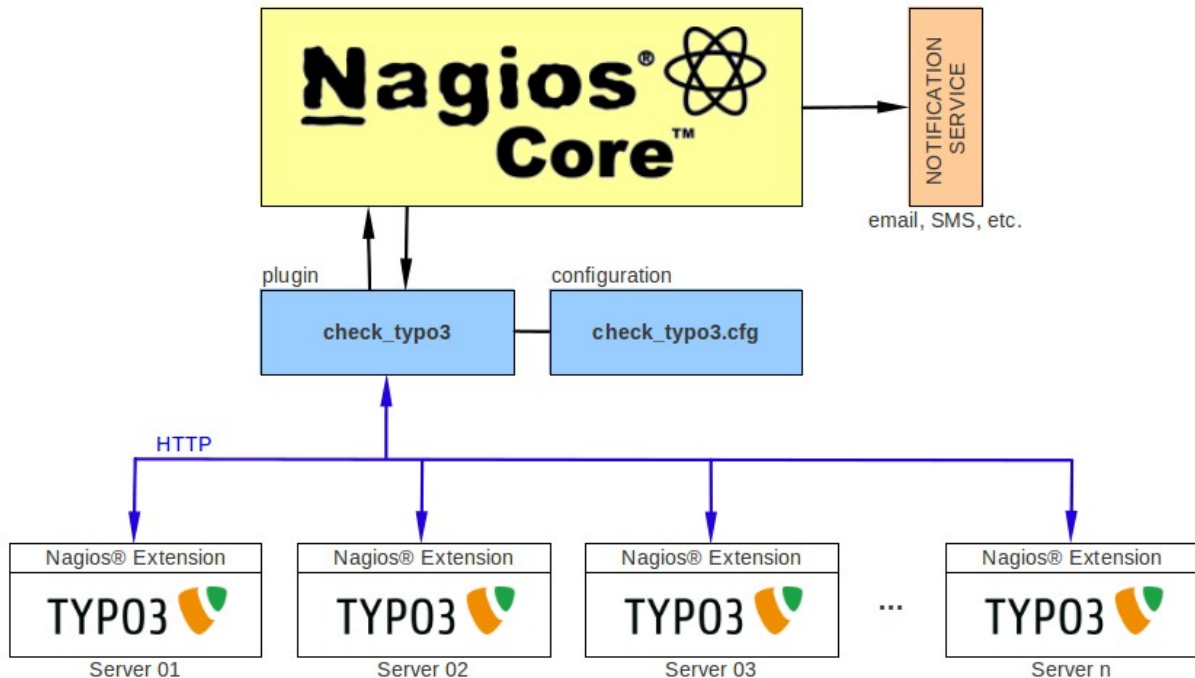


The Nagios® server (left) contains the Nagios® TYPO3 plugin which communicates via HTTP (see next section) with one or more TYPO3 servers. The other side - the TYPO3 server (right) - contains the TYPO3

Nagios® Extension (which is described in this document).

Technical Concept

The following image shows the technical concept of a monitoring system.



Simplified, the Nagios® Core executes its plugin "check_typo3" in a configured time interval. The plugin reads the configuration ("check_typo3.cfg") and requests the TYPO3 server via HTTP (TCP). The request includes a unique eID (eID=nagios) and (optionally) some further parameters.

TYPO3 receives the request and executes the Nagios® Extension which checks if the requesting server is allowed to access the data. If so, the extension gathers some information about the TYPO3 instance (all information is configurable in the TYPO3 backend) and shows it in a propriety format (text/plain).

The Nagios® plugin reads the response, analyzes the data and checks the information against its configuration. According to the configuration, one of the following states is reported back to the Nagios® Core (in addition to a meaningful condition description):

- OK
- WARNING
- CRITICAL
- UNKNOWN

Finally, the Nagios® Core reacts appropriately to this states and may notify system administrators (for example by sending an email or a SMS text message).

Please note that the TYPO3 Nagios® Extension is only **one** component of the system.

Screenshots

The following screenshots make the extension configuration options clear and give an example how Nagios® could interpret the data generated by the TYPO3 Nagios® Extension.

Enable features

TYPO3 Version [featureTYPO3Version]
Include TYPO3 version in output
☒

PHP Version [featurePHPVersion]
Include PHP version in output
☒

Extension List [featureExtensionList]
Include list of TYPO3 extensions and their version numbers in output
☒

Database Details [featureBasicDatabaseDetailsTables]
Include amount of database tables in output
☒

Database Details [featureBasicDatabaseDetailsProcesslist]
Include amount of database processes in output
☒

Depecation Log [featureDeprecationLog]
Include status if deprecation log in output
☒

Donation Notice [featureDonationNotice]
Include status of donation notice popup in output
☒

Screenshot above: the extension configurations allow you to enable or disable each feature of the TYPO3 instance. The settings control which information should be passed to Nagios®. The Nagios® TYPO3 plugin (the counterpart of the extension) reads this data and reacts according to the configuration (for example: triggers a warning if TYPO3 reports an old version).

Edit Pagecontent on page "nagios"

General Plugin Access

Plugin:
N Nagios Monitoring Plugin

Plugin Options:

General Settings Security Settings About TYPO3 Nagios(R) Plugin

☒ Include TYPO3 version in output

☒ Include PHP version in output

☒ Include list of TYPO3 extensions and their versions in output

☒ Include basic database details in output

☒ Include status of deprecation log in output

☒ Include status of donation notice popup in output

☒ Include current timestamp and timezone (server settings) in output

Edit Pagecontent on page "nagios"

General Plugin Access

Plugin:
N Nagios Monitoring Plugin

Plugin Options:

General Settings Security Settings About TYPO3 Nagios(R) Plugin

Comma separated list of IP addresses of Nagios(R) servers (leave empty for no restrictions):

☒ 127.0.0.1,192.168.1.123,123.45.67.89

☐ Supress header line (TYPO3 Nagios(R) Extension and version) in output

Screenshot above: if the extension is used as a "frontend plugin", all settings can also be easily configured in the TYPO3 backend via flexForms. However, the "FE plugin" method is deprecated and should not be used since version 1.2.0 of this extension.

The screenshot displays the Nagios web interface. On the left is a navigation menu with sections: General, Current Status, Reports, and System. The 'Current Status' section is active, showing a 'Tactical Overview' with links for Hosts, Services, and Host Groups. The main content area is titled 'Service Status Details For Service Group 'typo3''. It includes a 'Current Network Status' box at the top left, 'Host Status Totals' and 'Service Status Totals' boxes at the top right, and a large table below. The table lists various services (e.g., TYPO3 TYPO3, TYPO3 TYPO3) with columns for Host, Service, Status, Last Check, Duration, Attempt, and Status Information. All services are shown as 'OK'.

Current Network Status
 Last Updated: Thu Jan 5 12:13:17 EST 2012
 Updated every 120 seconds
 Nagios® Core™ 3.2.3 - www.nagios.org
 Logged in as michael.schams

Host Status Totals

Up	Down	Unreachable	Pending
7	0	0	0

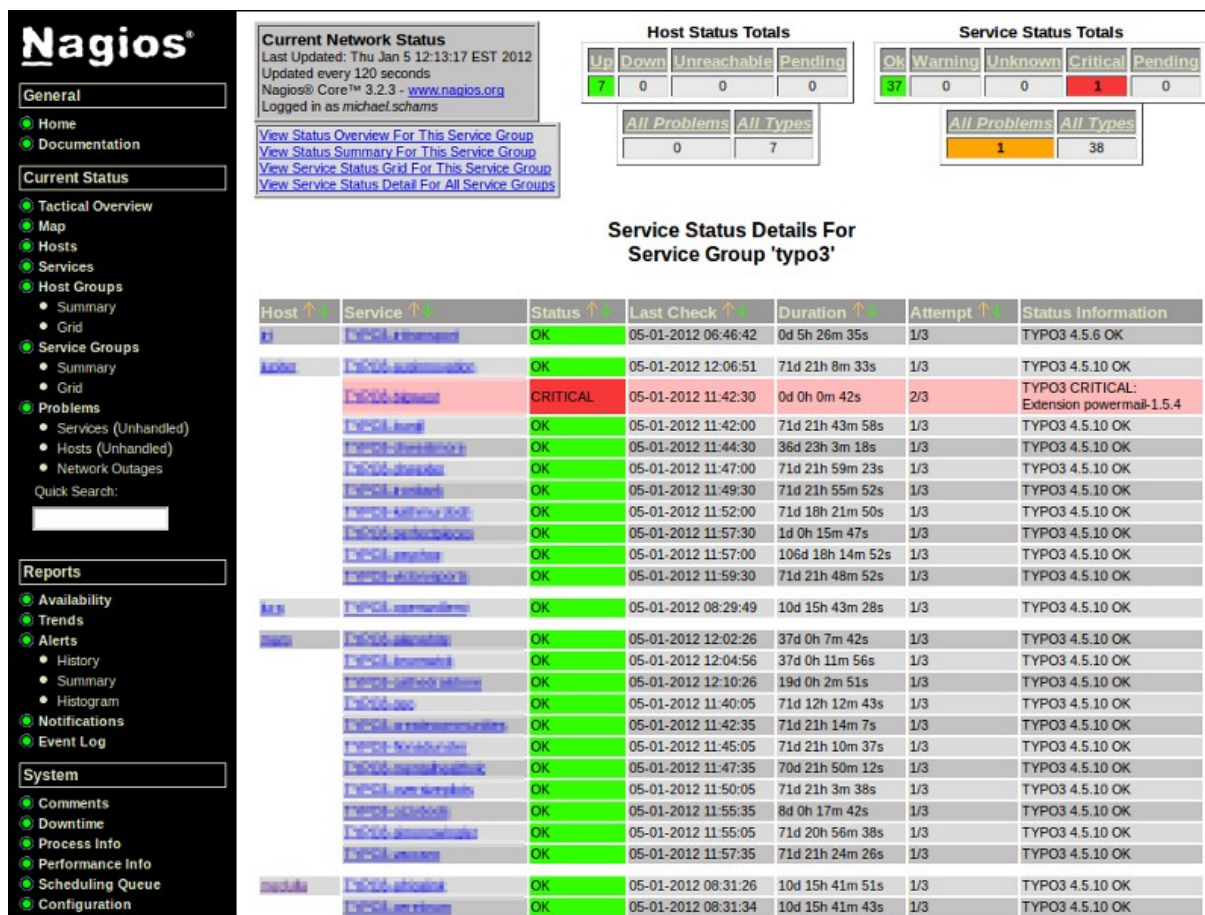
Service Status Totals

Ok	Warning	Unknown	Critical	Pending
38	0	0	0	0

Service Status Details For Service Group 'typo3'

Host	Service	Status	Last Check	Duration	Attempt	Status Information
typo3	TYPO3 TYPO3	OK	05-01-2012 06:46:42	0d 5h 26m 35s	1/3	TYPO3 4.5.6 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 12:06:51	71d 21h 8m 33s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 11:42:30	16d 12h 30m 47s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 11:42:00	71d 21h 43m 58s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 11:44:30	36d 23h 3m 18s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 11:47:00	71d 21h 59m 23s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 11:49:30	71d 21h 55m 52s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 11:52:00	71d 18h 21m 50s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 11:57:30	1d 0h 15m 47s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 11:57:00	106d 18h 14m 52s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 11:59:30	71d 21h 48m 52s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 08:29:49	10d 15h 43m 28s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 12:02:26	37d 0h 7m 42s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 12:04:56	37d 0h 11m 56s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 12:10:26	19d 0h 2m 51s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 11:40:05	71d 12h 12m 43s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 11:42:35	71d 21h 14m 7s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 11:45:05	71d 21h 10m 37s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 11:47:35	70d 21h 50m 12s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 11:50:05	71d 21h 3m 38s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 11:55:35	8d 0h 17m 42s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 11:55:05	71d 20h 56m 38s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 11:57:35	71d 21h 24m 26s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 08:31:26	10d 15h 41m 51s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 08:31:34	10d 15h 41m 43s	1/3	TYPO3 4.5.10 OK
typo3	TYPO3 TYPO3	OK	05-01-2012 08:29:41	10d 15h 43m 36s	1/3	TYPO3 4.5.10 OK

Screenshot above: a typical view of the Nagios® server web interface. The summary of the service group “TYPO3” lists all TYPO3 instances and gives system administrators a quick overview that all sites are “OK”, which servers (hosts) they are running on and which TYPO3 version they are using.



Screenshot above: the same Nagios® server web interface - but in this case Nagios® detected an insecure extension (powermail version 1.5.4, see TYPO3 Security Bulletin TYPO3-SA-2010-021) and was configured to generate a critical condition for the appropriate server. Other options would be to configure Nagios® to generate warnings if the TYPO3 version is outdated or the PHP version is a specific one for example.

Installation and Setup

Installing the extension is pretty easy and straight forward. In short, you only need to import/install the Nagios® Extension to your TYPO3 instance, configure the features you want to monitor and allow the Nagios server to retrieve (by providing its IP address). The chapter "Administration and Configuration" describes the settings and customization.

In older versions of this extensions (prior version 1.2.0), you had to create a new page (hidden in menu) and add the Nagios® Extension to this page. This is not longer required and deprecated. The current version of the extension still supports this setup for easy update and compatibility purposes but this functionality will be dropped in future versions.

If you update the extension from an old version to the latest version, please refer to chapter "Update" below.

Requirements

- TYPO3 version 4.0.0 or higher (tested with various TYPO3 versions between 4.0.x and 4.7.x, see <http://schams.net/nagios> for a support matrix)
- PHP version 5 (tested with PHP version 5.2.x and PHP version 5.3.x)

Nagios® server instances usually run on Linux/UNIX system. The TYPO3 Nagios® Extension is platform-independent and works fine on all operating system TYPO3 runs on.

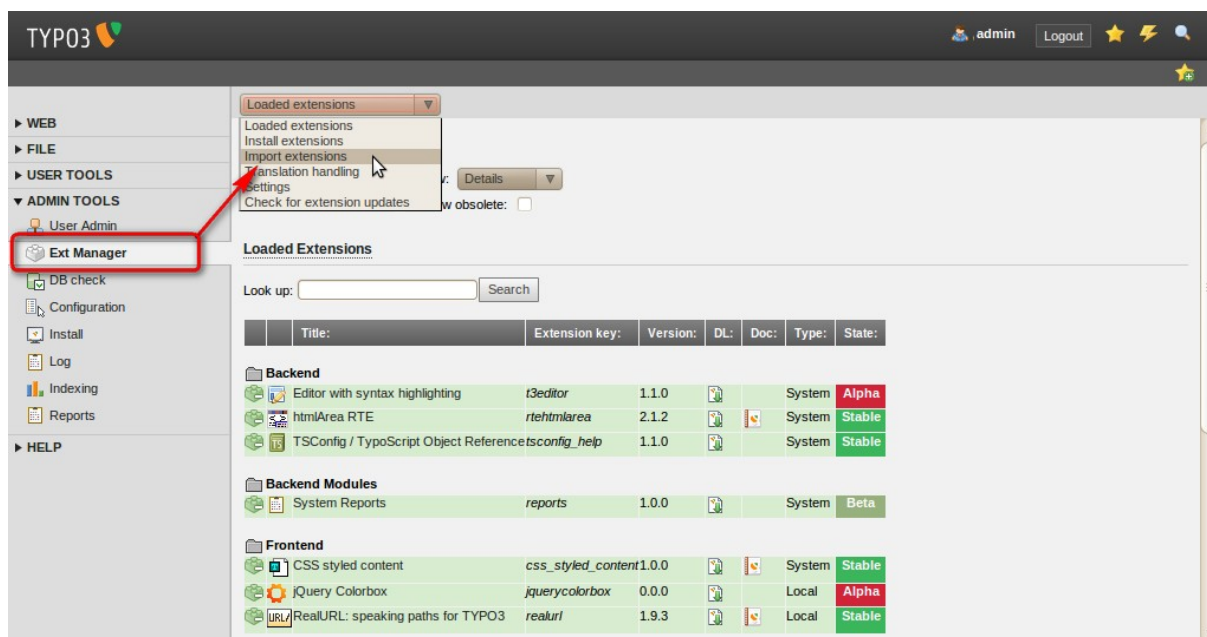
Detailed Installation Guide

This section describes the installation steps in detail. Please note that this documentation and the screenshots were created on a TYPO3 version 4.5-dev system. The visual appearance and some steps may differ depending on the TYPO3 version you are using and your individual configuration and site (for example: the "Extension Manager" will look different in newer versions of TYPO3).

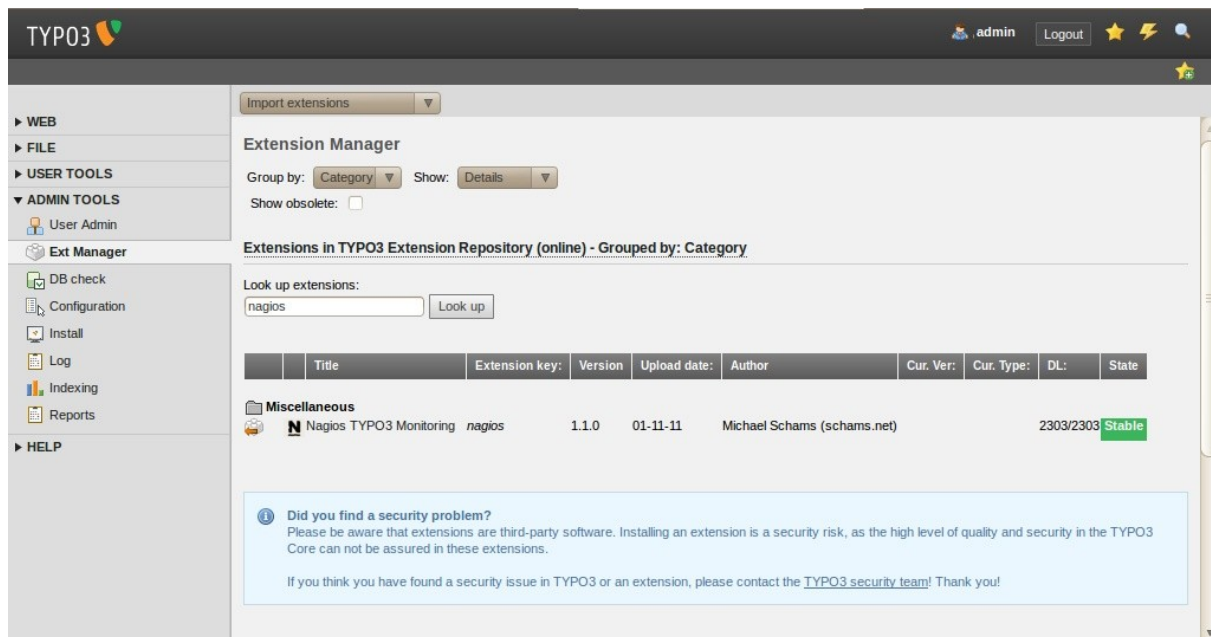
Step 1: import extension

Log in to the TYPO3 backend (BE) using a BE user with administrator privileges.

Select function "Extensions Manager" in "ADMIN TOOLS" module (left column) and switch to "Import extensions" if necessary.



Ensure the latest version of the list of available plugins (the "extension list") was retrieved from the TYPO3 Extension Repository (click button "Retrieve/update" if in doubt) and enter the extension key "**nagios**" in the input field "Look up extensions". Click button "Look up" to start your search.



The appearing list shows all extensions available which are Nagios®-related. Locate the correct one (Title: "Nagios TYPO3 Monitoring", extension key: "nagios") and click the "import" icon (left hand side) to transfer this extension from the online repository (TER) to the local directory typo3conf/ext/ (and into your TYPO3 instance).

If the import was successful, the next page shows a link "Install extension". You will also see a note that this extension provides additional configuration options which become available once it is installed. Click this link to install the extension.

The following page should report that the extension "nagios" has been installed and offers to enable some features (see next section of this manual).

Note: Alternatively you can upload a T3X file to the server instead of importing the extension from the TER. This method may be useful if you want to import/install a version that is currently not officially released yet. See "Download" page at <http://schams.net/nagios> for further details.

Step 2: enable features

At this point you can configure the output details (e.g. hide the list of installed extensions), see next chapter "Administration and Configuration".

You also have to install and set up the counterpart: Nagios® server and Nagios® "check_typo3" plugin, see: <http://schams.net/nagios>

Setup As Frontend Extension (DEPRECATED)

As already mentioned above, older versions of this extensions are "Frontend Plugins", which means, you have to create a new page and add the Nagios® Extension to this page. This is DEPRECATED and it is highly recommended to change the configuration to the new method if you still use this extension as a frontend plugin.

The steps describe in this section apply to the old setup for compatibility purposes.

- import and install the appropriate version of the extension via TYPO3's Extension Manager (EM)
- create a new page (standard page but "hidden in menu")
- add the TYPO3 Nagios® Extension as the only content element (plugin) on this page
- create a new extension template and include the static "Nagios Monitoring (nagios)" template on the new page
- configure the extension by editing the content element (plugin), see chapter "Administration and Configuration"
- check the output (content at the frontend) by accessing the appropriate page
- install and set up the counterpart: Nagios® server and Nagios® "check_typo3" plugin, see:

<http://schams.net/nagios>

Update

This section describes the best practice to update an existing version of the TYPO3 extension to a newer version.

Update from version 1.0.x to version 1.2.x or higher

The most important change in version 1.2.x compared to older versions of this extension is the introduction of eID, which makes the installation of the extension on a special page obsolete. With eID you can access the output by the following URL (without addressing a specific page ID):

<http://www.your-domain.com/?eID=nagios>

Version 1.2.x still supports the method of accessing the nagios extension on a page but it is highly recommended to change the setup to use the eID (note: this also requires to change the configuration of your check script on the Nagios® server).

If you update from version 1.0.x to version 1.2.x, you come across the extension configuration during the installation process. Ensure you enable the features you want to monitor as usual and do not forget to add the IP address(es) of the Nagios® server if required.

Change the arguments of the check script on the Nagios® server and remove “-pid <pageid>” (or “--pageid <pageid>”) and replace it with “--resource /?eID=nagios”. A typical line in the Nagios® configuration file could look like:

```
check_typo3! --hostname your-domain.com --resource /?eID=nagios
```

Check, if the new configuration works (reload Nagios® server and re-schedule the appropriate check). If everything is fine, you can delete the page in the TYPO3 backend, where the TYPO3 extensions was installed on.

Administration and Configuration

Monitoring a TYPO3 instance is usually the responsibility of a system manager or administrator. Therefore "normal users" (unprivileged backend users such as editors) can not configure the extension. Access to the "Extension Manager" is needed, which requires an Administrator account in TYPO3.

It is important to understand that you control the "features" (the information about the TYPO3 system which are passed to the Nagios® server) on the TYPO3 side. The Nagios® server (the TYPO3 plugin) reads, parses and "interprets" the information only. This means, if a specific information is disabled at the TYPO3 extension, it is not passed to the Nagios® server and therefore Nagios® will not react if there is a problem (e.g. outdated TYPO3 or PHP version).

Configuration (Enable/Disable Features)

The following settings let you define which information should be passed to the Nagios® server. Depending on your system and TYPO3 version more or less of the following options are available.

You can change the configuration via the "Extension Manager" (EM) as an Administrator backend user whenever you want in the future. You could also change the appropriate line in file "typo3conf/localhost.php" (but this is not the recommended way).

Include TYPO3 version in output

Enable or disable the version of the TYPO3 instance in output (for example: "TYPO3:version-4.5.0"). This might be useful to monitor if a specific version of TYPO3 becomes insecure and Nagios® should inform (warn) system administrators.

Include PHP version in output

Enable or disable the version of PHP in output (for example: "PHP:version-5.3.2"). This might be useful to monitor if a specific version of PHP becomes insecure, is unstable or is known as incompatible with TYPO3 and Nagios® should inform (warn) system administrators.

Include list of TYPO3 extensions and their versions in output

Enable or disable the extension key and version of all (loaded) extensions in output (for example: "EXT:templavoila-1.5.0"). This might be useful to monitor if a specific version of a specific TYPO3 extension becomes insecure and Nagios® should inform (warn) system administrators.

Include TYPO3 dependency warnings for extensions in output

Enable or disable the feature to include extensions in output, which have a dependency on a TYPO3 version and this does not match the TYPO3 version currently used. Extensions which do not have any dependencies set are not included in the output at all (this may change in the future).

Extension developers may define a dependency on TYPO3 between version x.y.z (min) and x.y.z (max) - or they may leave one or both of these values empty (undefined), which then becomes version 0.0.0 automatically. If the "max" version is undefined, this case is treated as "suspicious" and included in the output as well (in fact, version 0.0.0 is always less than the current TYPO3 version, so it is logical anyway that an undefined max version is included).

Include basic database details (amount of database tables) in output

Enable or disable basic database details (amount of database tables) in output (for example: "DBTABLES:62"). This might be useful to monitor because a MySQL server with less or more than an expected amount of database tables may be an indication of a problem.

Please note: Nagios® offers comprehensive MySQL database monitoring out-of-the-box. The TYPO3 Nagios® Extension does not pretend to replace this functionality. You may want to consider to configure Nagios® to monitor the MySQL server in a better way than the TYPO3 extension does. Please see the Nagios® documentation for further details: <http://www.nagios.org>.

Include basic database details (amount of DB processes) in output

Enable or disable basic database details (amount of DB processes) in output (for example: "DBPROCESSES:12"). This might be useful to monitor because a MySQL server with less or more than an expected amount of database tables may be an indication of a problem.

See note about MySQL database monitoring above.

Include status of deprecation log in output

Enable or disable the status of the deprecation log setting in output. The deprecation log was introduced in TYPO3 version 4.3.0. Any usage of deprecated functions in TYPO3's PHP API or TypoScript is written to a deprecation log file. This is a nice feature but in large production environments the log file may grow rapidly (depending on amount of requests, extensions used and other circumstances). The TYPO3 Nagios® Extension enables system administrators to be warned if this feature is enabled, predominantly useful for production ("live") sites.

Please note: in newer TYPO3 versions the system extension "reports" checks the size of the log file, too, and warns if a specific threshold is exceeded.

Include status of donation notice popup in output

Enable or disable the status of the donation notice popup setting in output. This feature was introduced in TYPO3 version 4.4.0 and reminds users about the benefit they have with TYPO3. It shows a popup window in the TYPO3 backend to administrators which encourages them to donate to the TYPO3 Association, 90 days after the installation. The donation notice popup was removed in TYPO3 version 4.5.1 again (and moved to the "About" section).

We believe this is/was a nice feature (we support the Association by being paying members) but under certain circumstances this popup is not desirable. The TYPO3 Nagios® Extension enables system administrators to be warned if this feature is enabled.

Please note: if you are interested in an ongoing and professional development of TYPO3 CMS, you should consider to support the community and the Association by a donation or a membership and not ignoring the donation notice popup.

Include the size of current disk usage (requires UNIX/Linux system)

Enable or disable to show the size of current disk usage used by the TYPO3 instance in output (for example: "DISKUSAGE:158042124", which is about 158 Mbytes). This feature requires that TYPO3 runs on a UNIX/Linux server (on Microsoft Windows systems no output or the value "not-supported" will be shown).

Note: the value is not 100% reliable and depends on some conditions. First of all, the UNIX/Linux command "du" (disk usage) has to be installed, available and executable by the system user who runs the web server (e.g. "www-data"). Secondly, if the system user does not have access to all subdirectories of the TYPO3 root folder, not all data can be counted and the result may be inaccurate.

Include site name in output

Enable or disable to show the site name of the TYPO3 instance in output. The site name can be configured in "typo3conf/localconf.php" (for example via the Install Tool), see: `$TYPO3_CONF_VARS['SYS']['sitename']`

Note: all characters except A to Z, digits 0 to 9, spaces, dots and dashes are filtered (removed from the string before output). The remaining string of characters is also be URL-encoded.

Include server name in output

Enable or disable to show the server name in output. The server name is the name of the server (e.g. virtual host) as set in the web server configuration - or the HTTP host name (sent by the client) if available .

Include current timestamp and timezone (server settings) in output

Enable or disable the current timestamp and timezone of the TYPO3 server. This might be useful to monitor in order to detect caching issues with the output or incorrect date/time settings of the TYPO3 server.

Comma separated list of IP addresses of Nagios(R) servers

This setting lets you limit the access to information about the TYPO3 instance. You can define one or more IP address(es) which are allowed to retrieve information about the TYPO3 instance. Separate two or more IP addresses by comma(s) and do not use spaces or any other character than 0 to 9 and the dot. See next chapter for an example.

Please see chapter "Security Aspects" for further information.

Suppress header line in output

The output of the extension shows a few lines with prefixed '#' as comments. Those comments include the extension name, extension version, etc. For example:

```
# Nagios TYPO3 Monitoring Version 1.2.4 - http://schams.net/nagios
```

We have been asked to suppress these lines and we implemented a checkbox to allow administrators to

deactivate them. Nevertheless, we are convinced that "security by obscurity" is definitely not the best approach and it should not make a difference to activate or deactivate this feature. If you are in doubt, leave this checkbox unchecked.

Security Aspects

Most of the information about the TYPO3 instance gathered by the extension and shown are not classified as sensitive in a lot of environments. Nevertheless, you may consider to restrict access to the TYPO3 page where the Nagios® Extension is installed (there is a reason why TYPO3 does not reveal its full major/minor/release version as long as you are not logged in at the backend).

In most cases the Nagios® server is the only "client" that needs access to the information generated by the extension and therefore the extension allows you to limit the access as described in the next section.

Restrict Access by Remote IP Address

In order to address the restriction the TYPO3 Nagios® Extension includes an input field that holds a comma-separated list of IP addresses of all Nagios® servers which may retrieve information about the TYPO3 instance.

Example:

127.0.0.1,192.168.1.123,123.45.67.89

If the IP address of the Nagios® server which initiates the requests to TYPO3 is not listed here, an "access denied" message appears (and the Nagios® server interprets this as a WARNING, CRITICAL or UNKNOWN condition, depending on its configuration):

```
# Nagios TYPO3 Monitoring Version 1.0.0 - http://schams.net/nagios

# ACCESS DENIED
# Remote server is not allowed to retrieve information about this TYPO3 server.
# If you think this is an error, check the settings of TYPO3 Nagios(R) Extension
# on page ID 15 at the TYPO3 backend.
```

If you do not want to restrict access to the Nagios® Extension, just leave the input field empty (this is the default).

Please note: access restrictions based on IP addresses are not 100% secure (IP addresses can be spoofed). Also, please keep in mind that under certain circumstances, proxy servers may distort this HTTP information. The TYPO3 Nagios® Extension checks the PHP predefined variable \$_SERVER['REMOTE_ADDR'] for comparison.

Secure Socket Layer (SSL)

In addition the Nagios® plugin "check_typo3" supports encrypted SSL requests (HTTPS) as well as basic/digest HTTP access authentication (HTTP 401). In short words, this means the TYPO3 web server could be configured to require username/password authentication from the Nagios® server (and refuse requests without correct credentials).

Due to the fact that the "Nagios® side" is not part of this documentation, please refer to the manual at <http://schams.net/nagios> or check out the documentation shipped with the Nagios® plugin "check_typo3".

Troubleshooting

This section should help in pinpointing and solving typical problems. However we have noticed that most issues occurred because system administrators did not read and/or follow the documentation :-)

If you should stumble across a problem that could not being solved by following the instructions and is not covered in this section, feel free to contact us! We are always happy to update the documentation and/or update/fix the coding in order to address problems.

The Nagios® server shows nothing: no error, no warning, no “OK”

If the Nagios® server shows nothing or just “TYPO3” (depending on the version of the Nagios® plugin you are using), but no error, no warning, no “OK” message, your configuration is incorrect.

In most cases the Nagios® server does not get valid data from the TYPO3 server, so you should check what the Nagios® server “sees”. Run the following command on the command line on your Nagios® server (replace “typo3server.com” with the correct server name of your TYPO3 server):

```
wget --quiet --output-document - "http://typo3server.com/?eID=nagios"
```

Check how the output looks like (see other troubleshooting points below).

Alternatively, you could access the URL of your TYPO3 server with your browser but keep in mind that the IP address of your machine (e.g. your network at home) has to be allowed to retrieve information of the TYPO3 Nagios® plugin (see chapter “Security Aspects”).

The frontend (output of the extension) shows weired HTML tags

It is most likely that you are using the TYPO3 Nagios® extension as a frontend plugin in TYPO3 and you have forgotten to include the TypoScript template. To solve this, login to the backend of TYPO3, go to the page where the Nagios® plugin has been installed and add the TypoScript template as described in chapter “Setup as Frontend Extension” of this manual.

The better solution is to use the “eID” method instead of using the extension as a frontend plugin. The frontend plugin is classified as “deprecated”, not supported anymore and its functionality will be dropped in the near future. See chapter “Update” for how to update to the eID method.

The frontend (output of the extension) shows a blank white page only

If you use an old version of the nagios extension prior version 1.2.0, check if you ticked at least one checkbox in the extension configuration on the page where the extension was installed, tab “General Settings”.

Search for PHP warnings or PHP fatal errors in the error log file generated by the web server (e.g. “error_log” when using Apache). You may increase the error reporting level in PHP’s configuration. If there are any warnings/errors which apply to the TYPO3 Nagios® Extension, please contact us (this is most likely a bug that was not detected during our tests).

The frontend (output of the extension) shows a header line only - nothing else

If you use an old version of the nagios extension prior version 1.2.0 and if you have added the extension to a new page without saving the configuration, no data is shown (except the header line “Nagios TYPO3 Monitoring Version 1.x.x - http://schams.net/nagios” with a leading ‘#’). Simply apply the extension configuration (FlexForm data) by accessing the appropriate page in the TYPO3 backend, editing the content element “Nagios Monitoring Plugin”: review the configuration (predominantly check boxes and security settings) and save the page (“save and close document”). Reload the page in the frontend and check if all configured information appear.

The “disk usage” value seems to be wrong

If the system user (e.g. “www-data”) does not have access to all subdirectories of the TYPO3 root folder, not all data can be counted and the result may be inaccurate. See notes in chapter “Administration and Configuration” at the appropriate check.

The “disk usage” is not available on my Microsoft Windows server

The “disk usage” checks requires a UNIX/Linux-based system and the command “du” (disk usage) has to be installed. “disk usage” is not available on Microsoft Windows server. See notes in chapter “Administration and Configuration” at the appropriate check.

Some characters are missing in the “site name” (e.g. German umlauts)

Special characters such as German umlauts, brackets, etc. are filtered. See notes in chapter “Administration

and Configuration” at the appropriate check for further details.

Further Developments

Later versions of the TYPO3 Nagios® Extension may contain the following features:

- further dependency checks (e.g. report if an extension depends on a specific PHP version)
- show the results of TYPO3's system extension "reports"
- report the size of the deprecation log file as DEPRECATIONLOGFILESIZE (system extension "reports" warns if 10MB/100MB file size is exceeded)
- maybe YOUR ideas and suggestions?!

Contributions

TYPO3 inspires people to share! Nagios® as well as the TYPO3 Nagios® Extension are published under the GNU GPL V2.

We would like to encourage you to get in touch with us if you have any ideas or suggestions how to improve the extension (e.g. new features) or if you modified, updated, simplified, changed, extended the existing code. We are always happy to consider implementing changes in future versions of the extension.

Many thanks to the following people for their feedback and/or contributions (in alphabetical order): Milan Altenburg, Markus Bischof, Felix Herrman, Christian Lerrahn

Sponsorship

Due to the nature of this extension and the focus to support a large scale of infrastructure and TYPO3 servers it is likely that the extension is used in commercial environments.

In order to address specific needs for ad-hoc support, maintenance or change requests, we offer commercial support. You are also welcome to sponsor the development or pay for a customized version which fully meets your individual requirements.

Read more about contributions, sponsorship options and commercial/non-commercial support at: <http://schams.net>.

You may also want to consider to use the commercial version of Nagios®, see: <http://www.nagios.com>.

ChangeLog

See [ChangeLog online \(TER\)](#) for a complete list of changes. The following table shows a summary and the released or milestone versions only.

Version:	Date:	Changes:
0.0.1	2010-09-19	Initial version (alpha version - not published)
0.1.0	2010-10-04	First test version (beta version - not published)
1.0.0	2011-04-01	Officially released stable version (published at the TYPO3 Extension Repository "TER")
1.0.1	2011-10-07	Implementation of eID method and other significant code changes (beta version - not published)
1.1.0	2011-11-01	Officially released stable version (accidentally published as nagios version 1.2.0)
1.2.1	2011-11-01	Corrupted version information fixed (published as nagios version 1.2.1)
1.2.2	2011-12-01	Minor code optimizations and small bug fixes Compatibility with TYPO3 version 4.1.x and TYPO3 version 4.2.x implemented Documentation updated Officially released (published at the TYPO3 Extension Repository "TER") as beta version
1.2.3	2012-01-05	New check "disk usage" implemented Option to include site name and server name implemented Documentation updated (new screenshots generated, and more) Officially released stable version (published at the TYPO3 Extension Repository "TER")
1.2.4	2012-05-01	New check "extension dependency" (TYPO3 min/max versions) implemented Display Nagios plugin version and IP address of Nagios server implemented Deprecated use of the FE plugin generates warning message Some internal code optimizations implemented (e.g. avoid entries in TYPO3's deprecation log but ensure compatibility with older TYPO3 versions, and other optimizations) Documentation updated Officially released stable version (published at the TYPO3 Extension Repository "TER")