

The Industry Standard in IT Infrastructure Monitoring

Purpose

This document describes how to manage hosts and host groups using the Nagios XI Core Config Manager. This document will discuss the following items:

- Adding hosts
- Modifying hosts
- Deleting hosts
- Copying hosts
- Displaying host information
- Managing host groups
- Deleting host groups
- Using host templates

Target Audience

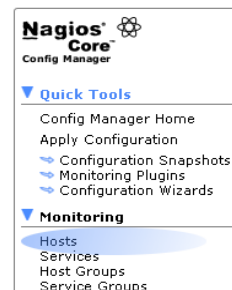
This document is intended for use by Nagios XI Administrators and assumes the reader has administrator privileges for the Core Config Manager.

Hosts Overview

Hosts can most easily be setup using the **Monitoring Wizard** under the main **Configure** page. However, many administrators will need more customized options, or a greater degree of control over their monitoring setup. The Nagios XI Core Config Manager allows for precise control over host monitoring, notifications, and configurations.

Adding Hosts

To manually add a new host, select the **Monitoring** → **Hosts** link located on the right menu of the Core Config Manager.



This will bring up the **Host Management** page, which displays a list of the current hosts being monitored by Nagios XI.

Click the **Add New** button to manually add a new host.

Nagios Core Config Manager

Configuration User: nagiosadmin [Logout](#)

Host Management

Check All Search:

Host Name	Description	Active	Sync Status	Actions
<input type="checkbox"/> 192.168.5.20		Yes	Synced	
<input type="checkbox"/> 192.168.5.42	Switch	Yes	Synced	
<input type="checkbox"/> 192.168.5.67	CentOS VM	Yes	Synced	
<input type="checkbox"/> localhost	Loopback	Yes	Synced	
<input type="checkbox"/> MySwitch		Yes	Synced	
<input type="checkbox"/> www.amazon.com		Yes	Synced	
<input type="checkbox"/> www.cnn.com		Yes	Synced	

With Checked:

This will bring up a tabbed set of forms where you can manually specify all of the settings for your new host. All form fields labeled with an asterisk are required fields.

The **Common Settings** tab allows you to define the primary host parameters, templates, and host groups.

To see what parameters are expected in each field, select the blue question mark next to each field to see a detailed description of each form field.

For more detailed descriptions of Nagios commands and the parameters they take, see http://nagios.sourceforge.net/docs/3_0/ for a complete reference.

Host Management

Every command in the **Check command** dropdown list is associated with a set of Nagios Core commands and arguments.

Host parameters can be defined from an existing template, which are accessible from the dropdown menu labeled **Template Name**, and by clicking the **Insert** button.

Hosts can also be assigned to an existing Host group by selecting the **Modify** icon located to the right of the **Host groups** field.

This will bring up a selection box where you can choose which existing groups to assign the host to. The box displays which host groups are *available*, and which host groups have been *selected* for a particular host.

The **Check Settings** tab allows you to specify the settings for frequency of checks and also the host state. If a problem is detected with a connection, you can specify the details of how the problem is handled.

Host Management

Common Settings | **Check Settings** | Alert Settings | Misc Settings

Check Settings

Initial state o d u ?

Max. check attempts* ?

Active checks enabled on off skip null ?

Check period* ?

Check freshness on off skip null ?

Event handler ?

Low flap threshold % ?

Flap detection enabled on off skip null ?

Retain status information on off skip null ?

Process perf data on off skip null ?

Retry interval min ?

Check interval min ?

Passive checks enabled on off skip null ?

Freshness threshold sec ?

Obsess over host on off skip null ?

Event handler enabled on off skip null ?

High flap threshold % ?

Flap detection options o d u ?

Retain non-status information on off skip null ?

* required

Be sure to note the *required fields, and view the help boxes for details on the field arguments.

The **Alert Settings** tab allows you to specify your notification settings using your existing contacts and contact groups.

Host Management

Common Settings | Check Settings | **Alert Settings** | Misc Settings

Alert Settings

Contacts* ?

Contact groups* ?

+ null standard ?

+ null standard ?

Notification period* ?

Notification interval* ?

Notification enabled on off skip null ?

Notification options d u r f s ?

First notification delay % ?

Stalking options o d u ?

* required

The **Misc Settings** tab is for defining additional host information and can be used for adding notes, icon images, and also for setting *Free variable definitions*.

Notes on *Free variables* (custom object variables):

NagiosQL supports custom object variables.

There are a few important things that you should note about custom variables:

- Custom variable names must begin with an underscore (`_`) to prevent name collision with standard variables
- Custom variable names are case-insensitive
- Custom variables are inherited from object templates like normal variables
- Scripts can reference custom variable values with macros and environment variables

Example:

```
define host{
    host_name linuxserver
    _mac_address 00:06:5B:A6:AD:AA ; <-- Custom MAC_ADDRESS variable
    _rack_number R32 ; <-- Custom RACK_NUMBER variable
    ...
}
```

Once you've finished creating your new host, click the **Save** button to return to the **Host Management** page. Click the **Apply Configuration** button to restart Nagios XI and put the new settings into effect. Nagios XI will verify the settings and display a success message of the host was set up correctly.

Applying Configuration

Command submitted for processing...
 Waiting for configuration verification.....
 Configuration applied successfully.

Success! Nagios Core was restarted with an updated configuration.

[View configuration snapshots](#)

Modifying Hosts

Host can be modified by selecting the **Modify** icon  from the **Host Management** page.

This will bring up the same set of tabbed menus covered in the **Adding Hosts** section of this tutorial. See the above section for a detailed walk through of the menus that control host settings.


Host Management

Check All Search:

Host Name	Description	Active	Sync Status	Actions
<input type="checkbox"/> 192.168.5.20		Yes	Synced	
<input type="checkbox"/> 192.168.5.42	Switch	Yes	Synced	
<input type="checkbox"/> 192.168.5.67	CentOS VM	Yes	Synced	
<input type="checkbox"/> localhost	Loopback	Yes	Synced	
<input type="checkbox"/> MySwitch		Yes	Synced	
<input type="checkbox"/> www.amazon.com		Yes	Synced	
<input type="checkbox"/> www.cnn.com		Yes	Synced	
<input type="checkbox"/> www.freshmeat.net	Freshmeat	Yes	Synced	

 With Checked:

Deleting Hosts

Host can be deleted by selecting the **Delete** icon  from the **Host Management** page.

Important Note: Host can only be deleted once their dependent services are removed. To see if a host has dependencies click the **Information** icon to check for dependencies. This information will display at the bottom of the **Host Management** page, and will state whether or not deletion is possible.

Host Management

Check All Search:

Host Name	Description	Active	Sync Status	Actions
<input type="checkbox"/> 192.168.5.20		Yes	Synced	
<input type="checkbox"/> 192.168.5.42	Switch	Yes	Synced	
<input type="checkbox"/> 192.168.5.67	CentOS VM	Yes	Synced	
<input type="checkbox"/> localhost	Loopback	Yes	Synced	
<input type="checkbox"/> MySwitch		Yes	Synced	
<input type="checkbox"/> www.amazon.com		Yes	Synced	
<input type="checkbox"/> www.cnn.com		Yes	Synced	
<input type="checkbox"/> www.freshmeat.net	Freshmeat	Yes	Synced	

With Checked:

To delete a host with dependencies, make sure all of the **Services** assigned to this host are deleted first.

To remove dependent services, select the **Services** link to bring up the **Service Management** page.

Nagios Core
Config Manager

Quick Tools

- Config Manager Home
- Apply Configuration
- Configuration Snapshots
- Monitoring Plugins
- Configuration Wizards

Monitoring

- Hosts
- Services**
- Host Groups
- Service Groups

Use the **Config name filter** to bring up all services being used by the selected host.

Service Management

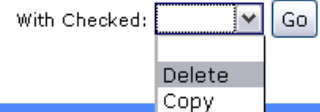
Check All Search:

Config name filter:

Config Name	Service Name	Active	Sync Status	Actions
<input type="checkbox"/> 192.168.5.20	Ping			
<input type="checkbox"/> 192.168.5.20	Printer Status			
<input type="checkbox"/> 192.168.5.42				
<input type="checkbox"/> localhost	Current Load			
<input type="checkbox"/> localhost	Current Users	Yes	Synced	
<input type="checkbox"/> localhost	HTTP	Yes	Synced	
<input type="checkbox"/> localhost	PING	Yes	Synced	
<input type="checkbox"/> localhost	Root Partition	Yes	Synced	
<input type="checkbox"/> localhost	SSH	Yes	Synced	
<input type="checkbox"/> localhost	Total Processes	Yes	Synced	
<input type="checkbox"/> SSH Check	SSH Check	Yes	Synced	
<input type="checkbox"/> www.amazon.com	Web Transaction	Yes	Synced	
<input type="checkbox"/> www.cnn.com	DNS IP Match	Yes	Synced	
<input type="checkbox"/> www.cnn.com	DNS Resolution	Yes	Synced	
<input type="checkbox"/> www.cnn.com	HTTP	Yes	Synced	

With Checked:

Select the **Check All** checkbox, then delete the dependent services by selecting **Delete** from the **With Checked** drop down list. Once all dependent services are deleted, return to the **Host**



Management page and use the **Delete** icon to delete the host.

If the host was deleted successfully, Nagios XI will display the updated database information at the bottom of the **Host Management** page. If there are unresolved dependencies, Nagios XI will display an error message in red at the bottom of the page.

Host Management

Check All Search:

Host Name	Description	Active	Sync Status	Actions
<input type="checkbox"/> 192.168.5.20		Yes	Synced	
<input type="checkbox"/> 192.168.5.42	Switch	Yes	Synced	
<input type="checkbox"/> 192.168.5.67	CentOS VM	Yes	Synced	
<input type="checkbox"/> localhost	Loopback	Yes	Synced	
<input type="checkbox"/> MySwitch		Yes	Synced	
<input type="checkbox"/> www.amazon.com		Yes	Synced	
<input type="checkbox"/> www.cnn.com		Yes	Synced	
<input type="checkbox"/> www.freshmeat.net	Freshmeat	Yes	Synced	

With Checked:

Data successfully deleted. Affected rows: 1
The associated, now obsolete, configuration files were deleted successfully!

Once the host is deleted, be sure to click the **Apply Configuration** button to see the changes take effect.

Copying Hosts

To copy a host, select the **Copy** icon from the **Host Management** page. After creating a copy, the duplicate host will be assigned a default name that will need to be changed. Host copies are also *inactive* by default, and will need to be activated for monitoring use. To rename and activate a host copy, select the

Modify icon.

<input type="checkbox"/> www.cnn.com	Yes	Synced	
<input type="checkbox"/> www.nagios.com	Yes	Synced	
<input type="checkbox"/> www.nagios.com (1)	No	Sync Missed	

With Checked:

Change the entry for **Host Name** to a valid name.

Note: NagiosQL does not allow the use of parenthesis “ () ” as a database entry for a host name and will generate an error message if the name is not changed. NagiosQL will accept underscores and dashes as legal characters.

To activate the host copy, select the **Active** checkbox.

Once changes are complete, save settings and apply the configuration.

Host Management

Common Settings Check Settings Alert Settings Misc Settings

Common Settings

Host Name* Description*

Address* Display name

Parents Host groups

+ null standard Active

Check command

Command view


\$ARG1\$ \$ARG5\$

\$ARG2\$ \$ARG6\$

\$ARG3\$ \$ARG7\$

\$ARG4\$ \$ARG8\$

Displaying Host Information

The **Information** icon  displays a host's database information and any related dependencies. The database information will display at the bottom of the **Host Management** page.

Host Management

Check All Search:

Host Name	Description	Active	Sync Status	Actions
<input type="checkbox"/> 192.168.5.33		Yes	Synced	
<input type="checkbox"/> 192.168.5.42	Switch	Yes	Synced	
<input type="checkbox"/> 192.168.5.67	CentOS VM	Yes	Synced	
<input type="checkbox"/> localhost	Loopback	Yes	Synced	
<input type="checkbox"/> MySwitch		Yes	Synced	
<input type="checkbox"/> slashdot.org		Yes	Synced	
<input type="checkbox"/> www.cnn.com		Yes	Synced	
<input type="checkbox"/> www.freshmeat.net	Freshmeat	Yes	Synced	
<input type="checkbox"/> www.php.net		Yes	Synced	

 With Checked:

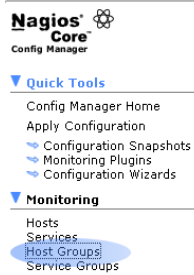
Relational information for **www.cnn.com** of table **tbl_host**:
 Relation to **tbl_hosttemplate**, entry **xiwizard_website_host** - deletion possible
 Relation to **tbl_service**, entry **www.cnn.com-HTTP** - deletion not possible
 Relation to **tbl_service**, entry **www.cnn.com-Ping** - deletion not possible
 Relation to **tbl_service**, entry **www.cnn.com-DNS Resolution** - deletion not possible
 Relation to **tbl_service**, entry **www.cnn.com-DNS IP Match** - deletion not possible

The database readout here shows related dependencies for this host.

Managing Host Groups

Host groups allow you to group hosts in a logical manner, making it easier for users to get a quick view of their network infrastructure. They will not have an impact on the notifications or access control, but will make it easier for both your users to grasp what they are looking at and for you as the administrator to quickly pinpoint where problems are occurring.

You can define new host groups by selecting the **Host Groups** menu item from the Core Config menu.



Nagios Core Config Manager

- Quick Tools
 - Config Manager Home
 - Apply Configuration
 - Configuration Snapshots
 - Monitoring Plugins
 - Configuration Wizards
- Monitoring
 - Hosts
 - Services
 - Host Groups**
 - Service Groups

Nagios Core Config Manager

Host Group Management


Host Group	Description	Active	Actions
<input type="checkbox"/> linux-servers	Linux Servers	Yes	
<input type="checkbox"/> VM Machines	VMs	Yes	

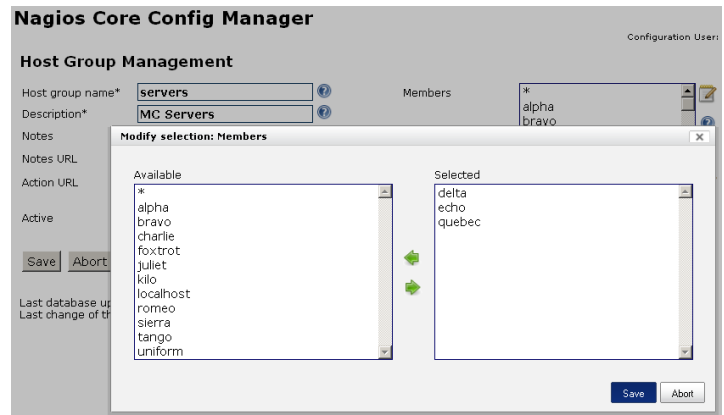
 With Checked:

Last database update: 2010-06-28 11:55:58
 Last change of the configuration file: 2010-06-28 11:56:16

Click the **Add New** button in the Host Group Management screen.

Host and even other host groups can be added to a host

group by selecting the **Modify** icon,  which will bring up a selection window that shows the available hosts, and the group's current members.



Nagios Core Config Manager

Host Group Management

Host group name*: Members: * alpha bravo

Description*:

Notes

Notes URL

Action URL

Active

Last database update: Last change of the configuration file:

Modify selection: Members

Available	Selected
<ul style="list-style-type: none"> * alpha bravo charlie foxtrot julet kilo localhost romeo sierra tango uniform 	<ul style="list-style-type: none"> delta echo quebec

Remember to choose the **Apply Configuration** option when you are done making configuration changes.

Using Host Templates

Host templates can be created by selecting the **Host Templates** link from the Core Config menu. This will bring up the **Host Template Management** page. Many administrators prefer to create their own host templates to specify default values for check commands, notification settings, and contact settings. Templates can also inherit values from other templates, which can be useful for creating universal settings for hosts and services.

- ▼ **Quick Tools**
 - Config Manager Home
 - Apply Configuration
 - Configuration Snapshots
 - Monitoring Plugins
 - Configuration Wizards
- ▼ **Monitoring**
 - Hosts
 - Services
 - Host Groups
 - Service Groups
- ▼ **Alerting**
 - Contacts
 - Contact Groups
 - Time Periods
 - Host Escalations
 - Service Escalations
- ▼ **Templates**
 - Host Templates
 - Service Templates
 - Contact Templates

From the **Host Template Management** page, you can add, modify, copy, or delete existing templates. Nagios XI comes with an existing selection of host templates that can be used or modified for your monitoring needs.

Host Template Management

Template Name	Description	Active	Actions
<input type="checkbox"/> generic-host		Yes	
<input type="checkbox"/> generic-printer		Yes	
<input type="checkbox"/> generic-switch		Yes	
<input type="checkbox"/> linux-server		Yes	
<input type="checkbox"/> windows-server		Yes	
<input type="checkbox"/> xiwizard_ftpservers_host		Yes	
<input type="checkbox"/> xiwizard_genericnetdevice_host		Yes	
<input type="checkbox"/> xiwizard_generic_host		Yes	
<input type="checkbox"/> xiwizard_linuxserver_host		Yes	
<input type="checkbox"/> xiwizard_printer_host		Yes	
<input type="checkbox"/> xiwizard_switch_host		Yes	
<input type="checkbox"/> xiwizard_website_host		Yes	
<input type="checkbox"/> xiwizard_webtransaction_host		Yes	
<input type="checkbox"/> xiwizard_windowsdesktop_host		Yes	
<input type="checkbox"/> xiwizard_windowsserver_host		Yes	

With Checked:

The **Host Template Management** page uses the same layout and menu system as the **Host Management** page. See the above section on **Adding Hosts** for details on navigating the user interface.

Important Note: Templates can inherit values from other parent templates. If a template has a parent template assigned under the **Additional Templates** box, it will inherit that template's settings. Be careful when modifying the **generic** templates, as these are the main parent templates and this may affect many of the other templates that inherit values from it.

Additional templates

Template Name

xiwizard_generic_host
↑ ↓

Template Name

* required