

How To Use The Core Config Manager For Host Management In Nagios XI 5

Purpose

This document describes how to manage hosts, host groups and host templates using the Nagios XI Core Config Manager (CCM). While monitoring wizards make it easy to set up new hosts in Nagios XI, the CCM allows for more precise control over host monitoring, notifications, and configurations.

Note: If you are using Nagios XI 2024, please refer to the updated guide [here](#).

Core Config Manager Overview

Hosts can most easily be setup using the Monitoring Wizard under the main Configure page.

However, some administrators may need more customized options, or a greater degree of control over their monitoring setup.

The Nagios XI CCM allows for precise control over host monitoring, notifications, and configurations. You can access the CCM from the Configure option on the top menu, and then select the Core Config Manager option under the Advanced Configuration option, or when you hover your mouse on the Configure option on the top menu it will appear as an option.

This document will discuss how to do the following items within CCM:

- [Adding hosts](#)
- [Modifying hosts](#)
- [Deleting hosts](#)
- [Copying hosts](#)
- [Managing host groups](#)
- [Using host templates](#)

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Adding Hosts

To manually add a new host, select the **Hosts** link located under **Monitoring** on the left menu of CCM. 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.

The screenshot shows the Nagios XI Core Config Manager interface. The left navigation menu is expanded to 'Monitoring', and the 'Hosts' link is circled in blue. The main content area displays the 'Hosts' management page with a table of 8 hosts. The table has columns for Host Name, Alias, Active, Status, Actions, and ID. The 'Add New' button is visible at the top left of the table area. Below the table, there are buttons for '+ Add New', 'Apply Configuration', and a 'Go' button with a dropdown menu set to 'With checked'. The 'Results per page' dropdown is set to 15.

<input type="checkbox"/>	Host Name	Alias	Active	Status	Actions	ID
<input type="checkbox"/>	192.168.107.60		Yes	Applied		5
<input type="checkbox"/>	192.168.157.129		Yes	Applied		10
<input type="checkbox"/>	192.168.157.131		Yes	Applied		3
<input type="checkbox"/>	192.168.157.133		Yes	Applied		4
<input type="checkbox"/>	exchange.nagios.org		Yes	Applied		12
<input type="checkbox"/>	jdm-ubuntu24		Yes	Applied		2
<input type="checkbox"/>	localhost	localhost	Yes	Applied		1
<input type="checkbox"/>	www.nagios.com		Yes	Applied		11

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Host Management

Common Settings | Check Settings | Alert Settings | Misc Settings

Host Name *
localhost

Alias
localhost

Address *
127.0.0.1

Display name

Manage Parents 0
Manage Templates 1
Manage Host Groups 0

Active

Save Cancel

Check command

Command view
No command selected

\$ARG1\$
\$ARG2\$
\$ARG3\$
\$ARG4\$
\$ARG5\$
\$ARG6\$
\$ARG7\$
\$ARG8\$

Add Arguments + | Delete Arguments -

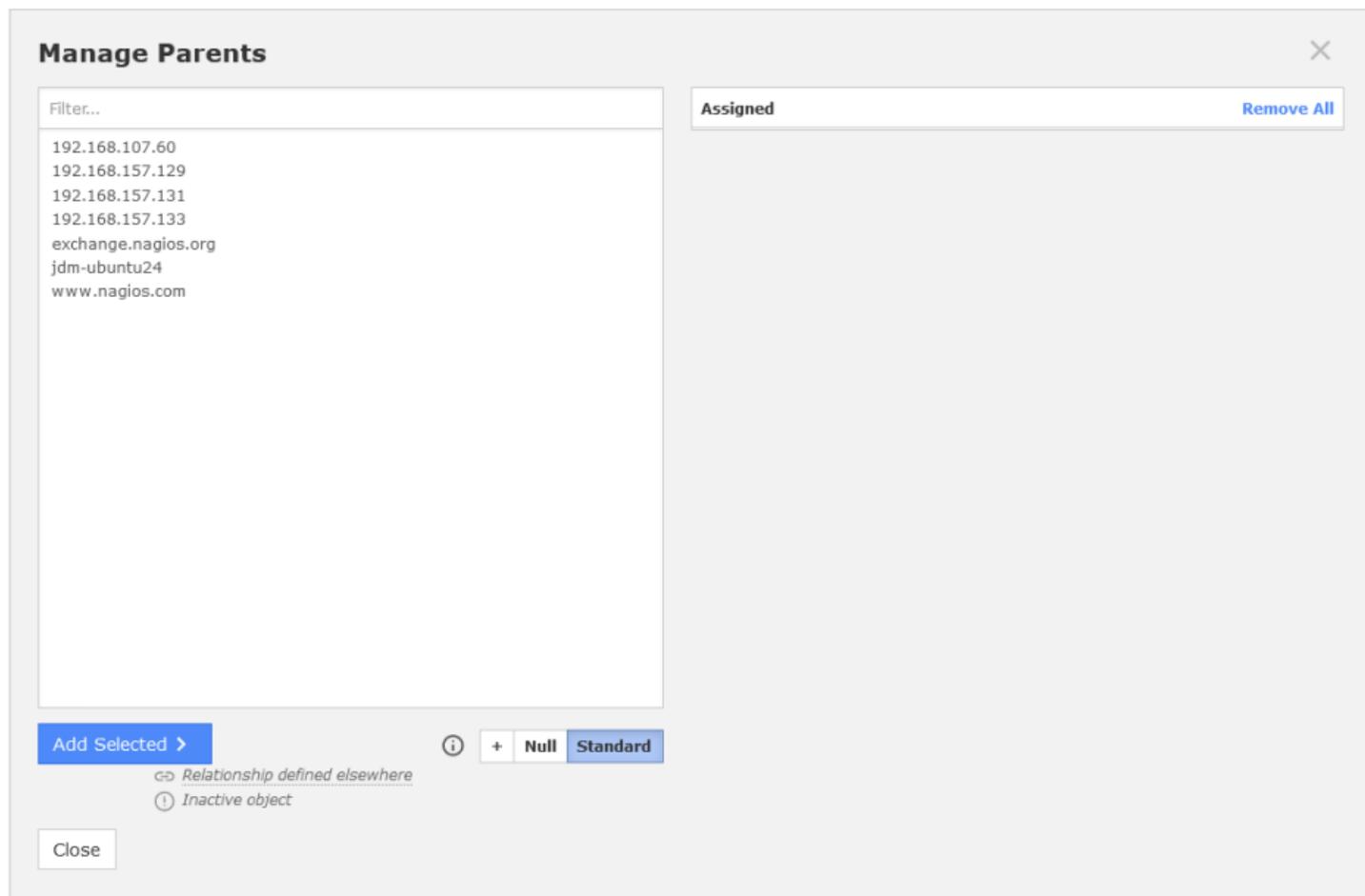
The **Host Management** page will open on the **Common Settings** tab.

This tab allows you to define the primary host parameters such as Host Name, Description, Address, and Display name.

All fields labeled with an asterisk (*) are required fields.

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Use the **Manage Parents** button to associate parent host(s) with the host.

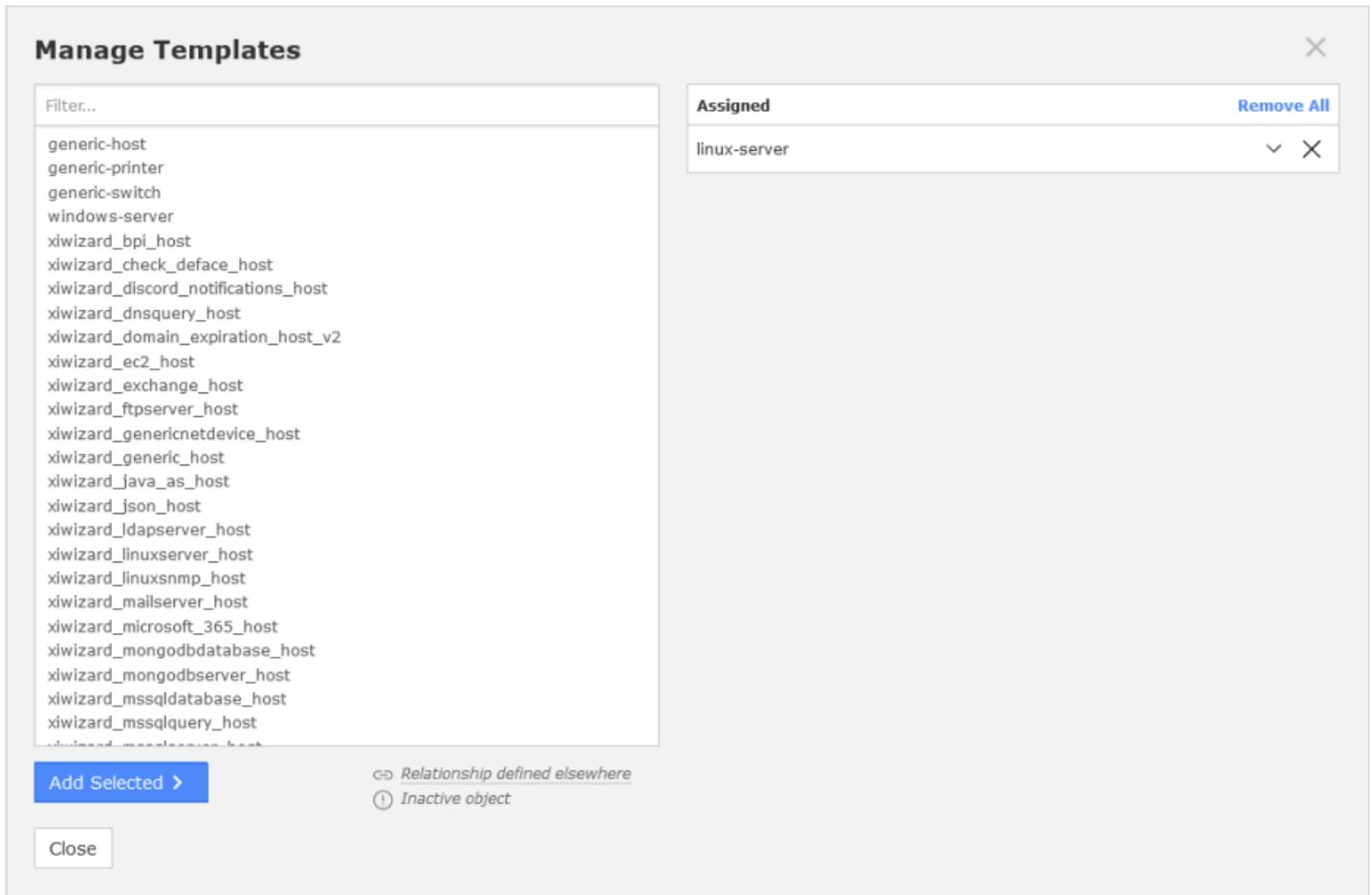


The screenshot shows the 'Manage Parents' dialog box in Nagios XI. The dialog has a title bar with a close button (X) in the top right corner. On the left side, there is a search filter labeled 'Filter..' and a list of hostnames: 192.168.107.60, 192.168.157.129, 192.168.157.131, 192.168.157.133, exchange.nagios.org, jdm-ubuntu24, and www.nagios.com. Below the list is a blue button labeled 'Add Selected >'. To the right of the list are three buttons: an information icon (i), a plus sign (+), and a 'Standard' button. Below these buttons are two small text labels: '↔ Relationship defined elsewhere' and 'ⓘ Inactive object'. At the bottom left of the dialog is a 'Close' button. On the right side of the dialog, there is a section titled 'Assigned' with a blue 'Remove All' button next to it.

Parents are used to specify network configuration connections.

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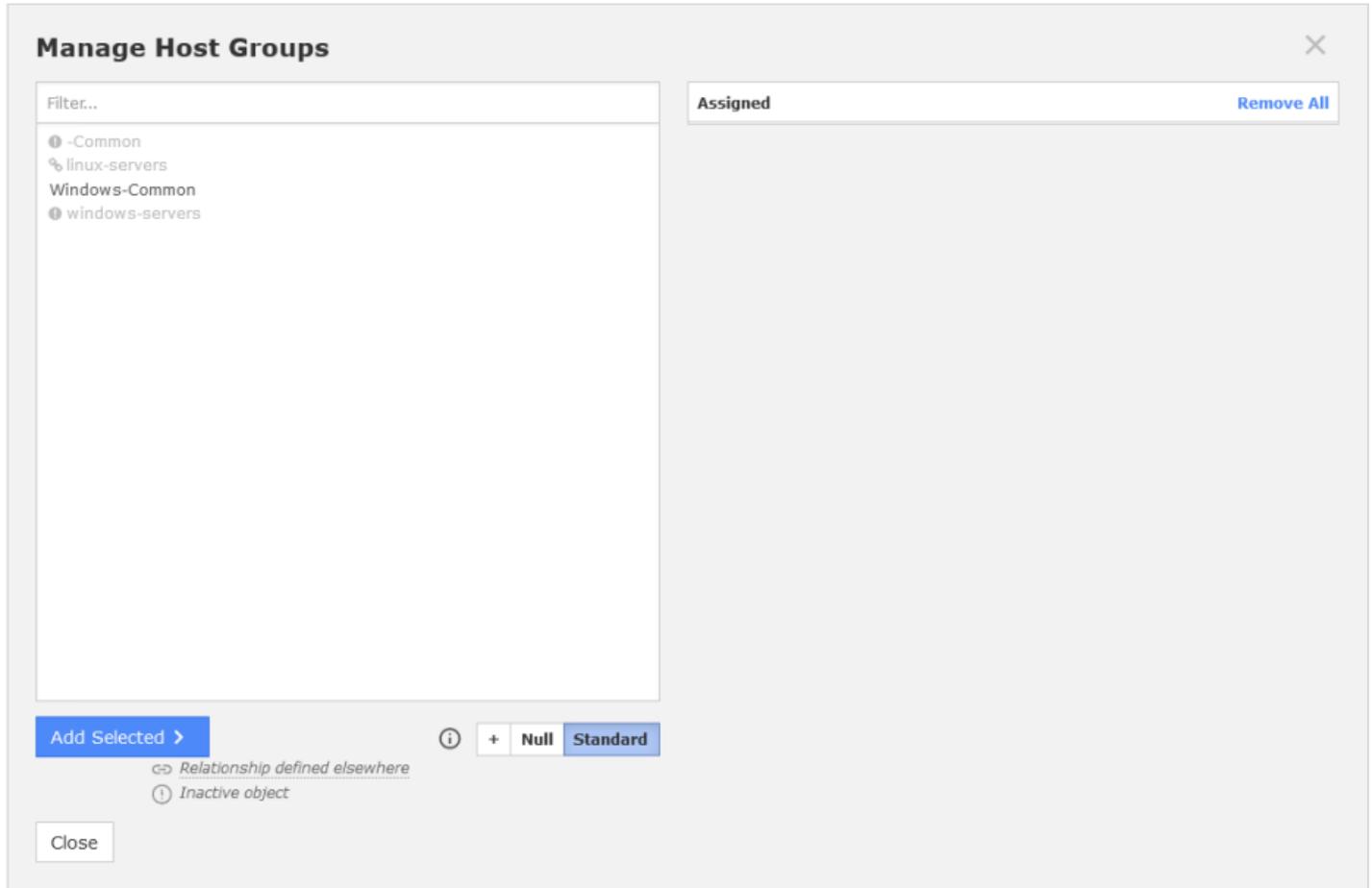
Use the **Manage Templates** button to associate template(s) with the host.



Templates provide a method to push the same host setting to similar hosts.

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Use the **Manage Host Groups** button to associate existing host group(s) with the host. Host groups are a way to group similar hosts together.



On the previous screenshot of the **Common Settings** tab you'll notice that the **Active** checkbox is checked. If this box is un-checked the host configuration won't be put into production when **Apply Configuration** is performed. However, the settings will remain in CCM until you activate the host object.

To define the check command for this host, you select the appropriate command from the **Check command** drop down list. On the previous screenshot of the **Common Settings** tab, you'll see that **check-host-alive** is selected. Every command in the **Check command** drop down list is associated with a set of Nagios Core commands and arguments, which are shown in the **Command view** field. In this example there are no additional parameters required for the \$ARGx\$ fields. For more detailed descriptions of Nagios commands see the following documentation:

<https://assets.nagios.com/downloads/nagioscore/docs/nagioscore/4/en/objectdefinitions.html#command>

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The **Check Settings** tab allows you to specify the settings for frequency of checks and the host state.

If a problem is detected with a connection, you can specify the details of how the problem is handled.

You will notice a lot of options have **Skip** chosen. This means that the setting is not being directly defined on the host object, this prevents any settings defined in templates from being overwritten.

If you look at the previous **Manage Templates** screenshot you'll see the template `xiwizard_genericnetdevice_host` is being used, which has these settings applied (as well as that template using another template).

The **Alert Settings** tab allows you to specify your notification settings.

Use the **Manage Contacts** and buttons to associate your existing contacts and contact groups with this host.

The screenshot shows the 'Host Management' interface with the 'Check Settings' tab selected. The interface includes a navigation bar with 'Common Settings', 'Check Settings', 'Alert Settings', and 'Misc Settings'. The 'Check Settings' section contains various configuration options:

- Initial state:** Down, Up, Unreachable (radio buttons)
- Check interval:** Input field with 'min' unit
- Retry interval:** Input field with 'min' unit
- Max check attempts:** Input field with 'attempts' unit
- Active checks enabled:** On, Off, Skip, Null (radio buttons)
- Passive checks enabled:** On, Off, Skip, Null (radio buttons)
- Check period:** Dropdown menu
- Freshness threshold:** Input field with 'sec' unit
- Check freshness:** On, Off, Skip, Null (radio buttons)
- Obsess over host:** On, Off, Skip, Null (radio buttons)
- Event handler:** Dropdown menu
- Event handler enabled:** On, Off, Skip, Null (radio buttons)
- Low flap threshold:** Input field with '%' unit
- High flap threshold:** Input field with '%' unit
- Flap detection enabled:** On, Off, Skip, Null (radio buttons)
- Flap detection options:** Down, Up, Unreachable (radio buttons)
- Retain status information:** On, Off, Skip, Null (radio buttons)
- Retain non-status information:** On, Off, Skip, Null (radio buttons)
- Process perf data:** On, Off, Skip, Null (radio buttons)

At the bottom, there are 'Save' and 'Cancel' buttons. A footer bar contains 'or Updates', 'About | Legal | Copyright © 2008-2024 Nagios'.

The screenshot shows the 'Host Management' interface with the 'Alert Settings' tab selected. The interface includes a navigation bar with 'Common Settings', 'Check Settings', 'Alert Settings', and 'Misc Settings'. The 'Alert Settings' section contains various configuration options:

- Notification period:** Input field with a dropdown arrow
- Notification options:** Down, Unreachable, Recovery, Flapping, Scheduled Downtime (radio buttons)
- Notification interval:** Input field with 'min' unit
- First notification delay:** Input field with 'min' unit
- Notification enabled:** On, Off, Skip, Null (radio buttons)
- Stalking options:** Down, Up, Unreachable, Notification, None (radio buttons)

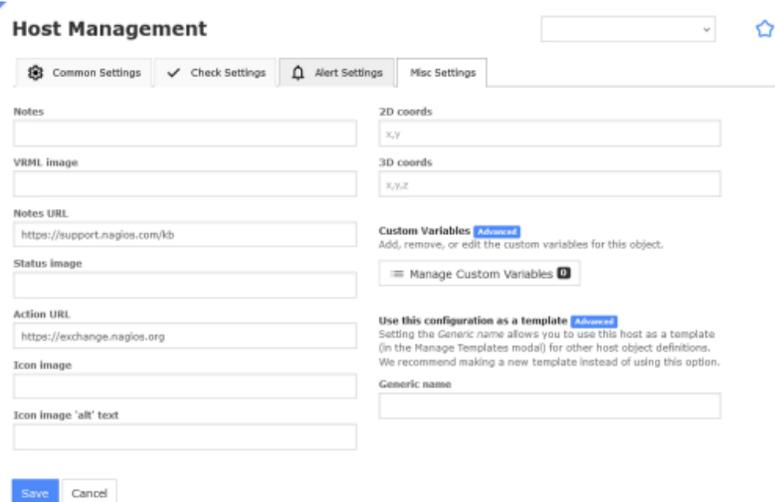
At the bottom, there are 'Save' and 'Cancel' buttons. A footer bar contains 'or Updates', 'About | Legal | Copyright © 2008-2024 Nagios'.

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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.

There are a few important things that you should note about Free variables (custom object 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



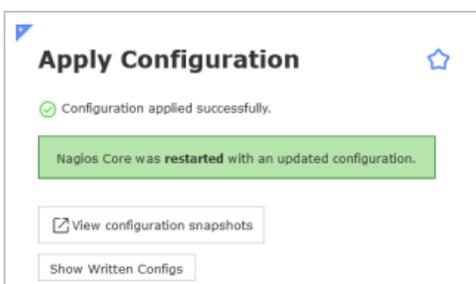
The screenshot shows the 'Host Management' interface with the 'Misc Settings' tab selected. The page contains several input fields for configuration: 'Notes', 'VRML image', 'Notes URL' (with a pre-filled URL 'https://support.nagios.com/kb'), 'Status image', 'Action URL' (with a pre-filled URL 'https://exchange.nagios.org'), 'Icon image', and 'Icon image "alt" text'. On the right side, there are fields for '2D coords' (X,Y), '3D coords' (X,Y,Z), and a 'Generic name' field. A 'Custom Variables' section includes a 'Manage Custom Variables' button. At the bottom, there are 'Save' and 'Cancel' buttons.

For additional information about using custom object variables see the following document:

[Understanding Nagios XI Notification Variables](#)

Once you've finished entering information for 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 that the host was set up correctly.

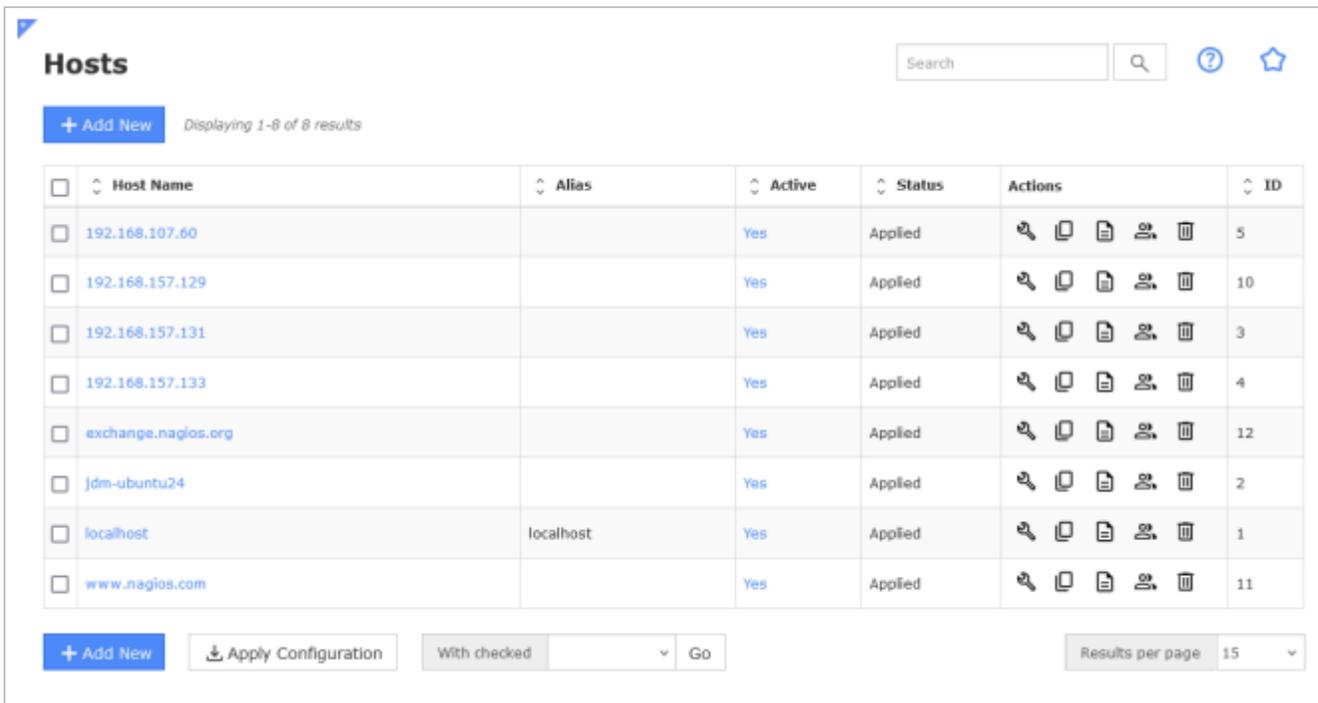


The screenshot shows the 'Apply Configuration' dialog box. It features a green checkmark icon and the text 'Configuration applied successfully.' Below this, a green box contains the message 'Nagios Core was restarted with an updated configuration.' At the bottom, there are two buttons: 'View configuration snapshots' and 'Show Written Configs'.

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Modifying Hosts

Host can be modified by clicking the **Modify** icon  OR the host name itself from the page.



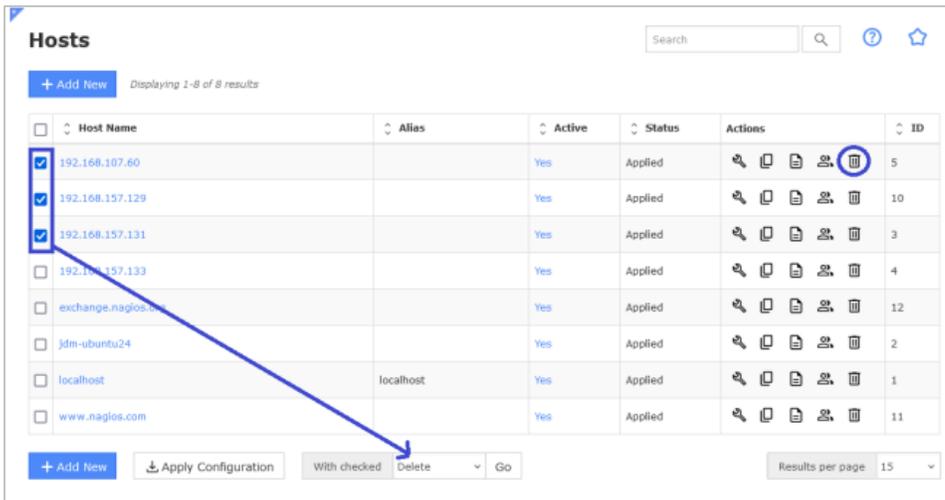
<input type="checkbox"/>	Host Name	Alias	Active	Status	Actions	ID
<input type="checkbox"/>	192.168.107.60		Yes	Applied	    	5
<input type="checkbox"/>	192.168.157.129		Yes	Applied	    	10
<input type="checkbox"/>	192.168.157.131		Yes	Applied	    	3
<input type="checkbox"/>	192.168.157.133		Yes	Applied	    	4
<input type="checkbox"/>	exchange.nagios.org		Yes	Applied	    	12
<input type="checkbox"/>	jdm-ubuntu24		Yes	Applied	    	2
<input type="checkbox"/>	localhost	localhost	Yes	Applied	    	1
<input type="checkbox"/>	www.nagios.com		Yes	Applied	    	11

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

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Deleting / Deactivating Hosts

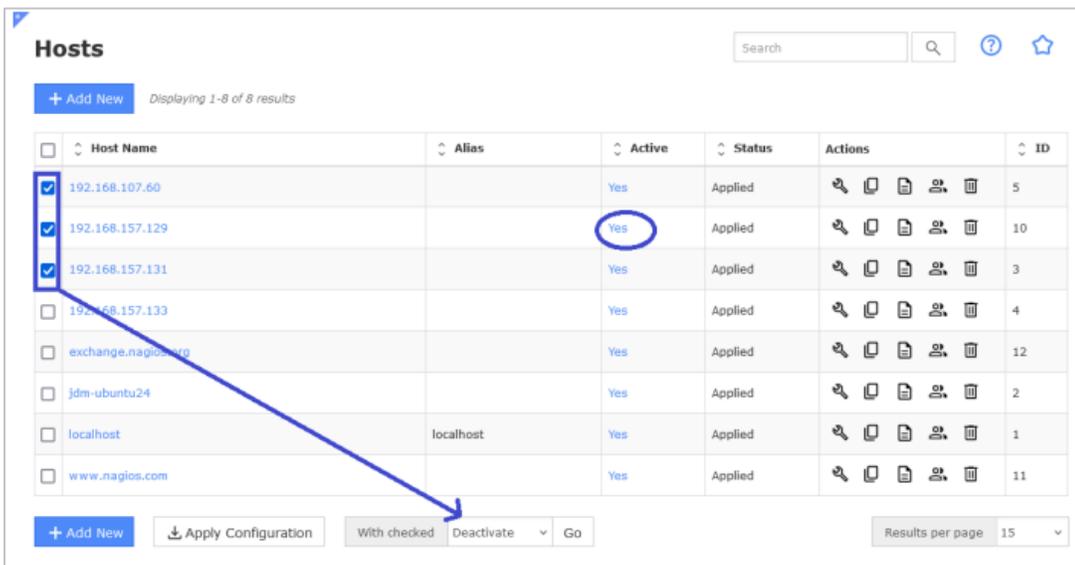
Host can be deleted by selecting the **Delete** icon from the **Host Management** page.



<input type="checkbox"/>	Host Name	Alias	Active	Status	Actions	ID
<input checked="" type="checkbox"/>	192.168.107.60		Yes	Applied		5
<input checked="" type="checkbox"/>	192.168.157.129		Yes	Applied		10
<input checked="" type="checkbox"/>	192.168.157.131		Yes	Applied		3
<input type="checkbox"/>	192.168.157.133		Yes	Applied		4
<input type="checkbox"/>	exchange.nagios.org		Yes	Applied		12
<input type="checkbox"/>	jdm-ubuntu24		Yes	Applied		2
<input type="checkbox"/>	localhost	localhost	Yes	Applied		1
<input type="checkbox"/>	www.nagios.com		Yes	Applied		11

Multiple hosts can also be deleted by selecting the desired hosts in the **left checkbox column** and then selecting **Delete** from the **With checked** drop down list.

Hosts can be activated or deactivated by clicking on the **Yes** or **No** link under the **Active** column. Deactivating a host is the same as deleting it as far as the monitoring engine is concerned, but this does preserve the host's configuration within Nagios XI if you want to recover it later. You can also deactivate multiple hosts using the **With checked** drop down list.



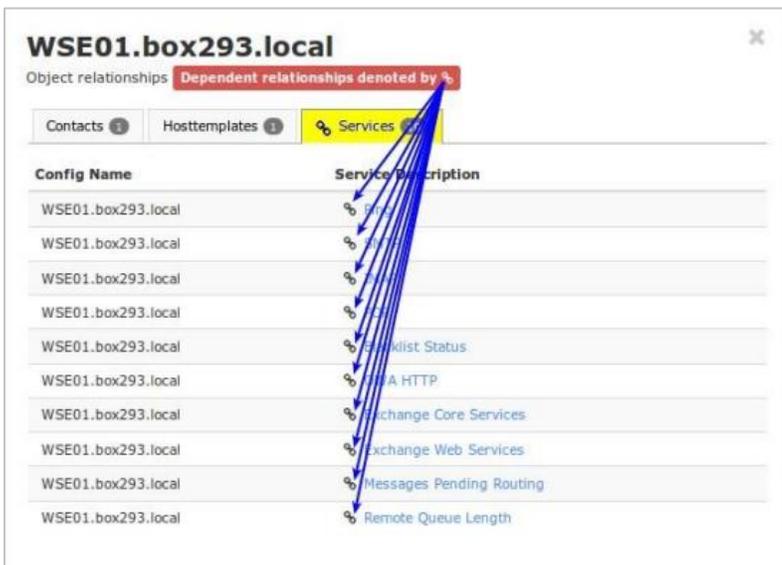
<input type="checkbox"/>	Host Name	Alias	Active	Status	Actions	ID
<input checked="" type="checkbox"/>	192.168.107.60		Yes	Applied		5
<input checked="" type="checkbox"/>	192.168.157.129		Yes	Applied		10
<input checked="" type="checkbox"/>	192.168.157.131		Yes	Applied		3
<input type="checkbox"/>	192.168.157.133		Yes	Applied		4
<input type="checkbox"/>	exchange.nagios.org		Yes	Applied		12
<input type="checkbox"/>	jdm-ubuntu24		Yes	Applied		2
<input type="checkbox"/>	localhost	localhost	Yes	Applied		1
<input type="checkbox"/>	www.nagios.com		Yes	Applied		11

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Note: Hosts can only be deleted/deactivated once their dependent services are also deleted/deactivated.

To see if a host has dependencies click the **Information** icon (i) to check for dependencies.

This information will be displayed in a pop-up window. In the screenshot to the right you can see this host has multiple services that prevent it from being deleted or de-activated.



The screenshot displays a pop-up window titled "WSE01.box293.local" with a close button (X) in the top right corner. Below the title, it says "Object relationships" and "Dependent relationships denoted by %". There are three tabs: "Contacts", "Hosttemplates", and "Services", with "Services" selected and highlighted in yellow. Below the tabs is a table with two columns: "Config Name" and "Service Description". The table lists ten entries, each with a red dependency icon (a circle with a percentage sign) in the "Service Description" column. Blue arrows point from the "Services" tab to each of these icons. The service descriptions are: "Exchange Core Services", "Exchange Web Services", "Messages Pending Routing", and "Remote Queue Length". The other six entries have generic descriptions like "Exchange Core Services" and "Exchange Web Services".

Config Name	Service Description
WSE01.box293.local	% Exchange Core Services
WSE01.box293.local	% Exchange Web Services
WSE01.box293.local	% Messages Pending Routing
WSE01.box293.local	% Remote Queue Length
WSE01.box293.local	% Exchange Core Services
WSE01.box293.local	% Exchange Web Services
WSE01.box293.local	% Exchange Core Services
WSE01.box293.local	% Exchange Web Services
WSE01.box293.local	% Exchange Core Services
WSE01.box293.local	% Exchange Web Services

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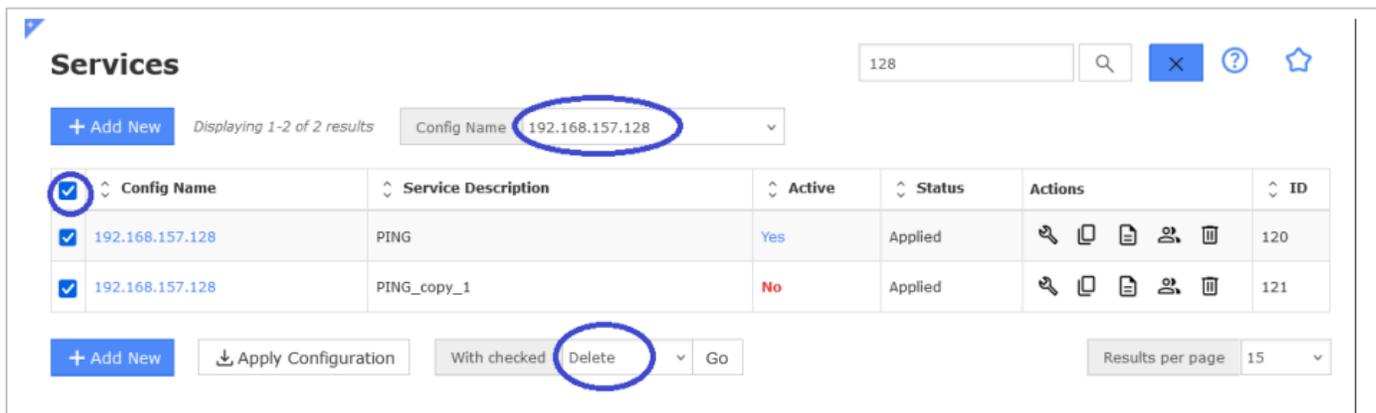
To delete a host with dependencies, make sure all of the services assigned to this host are deleted first.

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



Use the **Config Name** drop down list to bring up all services being used by the selected host.

Click the top-left **Checkbox**, this will select all the services in the list. From the **With Checked** drop down list select **Delete** and then click the **Go** button.



The image shows the Nagios XI Services management page. The 'Config Name' dropdown is set to '192.168.157.128'. The 'With checked' dropdown is set to 'Delete'. The 'Go' button is highlighted. The table below shows the services for the selected host.

Config Name	Service Description	Active	Status	Actions	ID
192.168.157.128	PING	Yes	Applied	    	120
192.168.157.128	PING_copy_1	No	Applied	    	121

Once all dependent services have been deleted, return to the page and use the Delete icon to delete the host. If the host was deleted successfully, Nagios XI will display a success message at the top of the page



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If there are unresolved dependencies, Nagios XI will display an error message in red at the top of the page.

```
Object ID: 44 of table tbl_host:
Relation to Services, entry: WSE01.box293.local-Ping - Dependent relationship
Relation to Services, entry: WSE01.box293.local-SMTP - Dependent relationship
Relation to Services, entry: WSE01.box293.local-IMAP - Dependent relationship
Relation to Services, entry: WSE01.box293.local-POP - Dependent relationship
Relation to Services, entry: WSE01.box293.local-Blacklist Status - Dependent relationship
Relation to Services, entry: WSE01.box293.local-OWA HTTP - Dependent relationship
Relation to Services, entry: WSE01.box293.local-Exchange Core Services - Dependent relationship
Relation to Services, entry: WSE01.box293.local-Exchange Web Services - Dependent relationship
Relation to Services, entry: WSE01.box293.local-Messages Pending Routing - Dependent relationship
Relation to Services, entry: WSE01.box293.local-Remote Queue Length - Dependent relationship
Object still has dependent relationships!Item was not deleted.
```

Once the host is deleted, be sure to click the **Apply Configuration** button for the monitoring of the host (and services) to stop.

Copying Hosts

Copying a host is a quick way to start monitoring a new host, especially if the new host will have similar (if not the same) monitoring settings.

To copy a host, click the **Copy** icon from the **Host Management** page for the host you want to copy.

The screenshot shows the 'Services' page in Nagios XI. At the top, there is a search bar with '128' and a search icon. Below the search bar, there is a '+ Add New' button and a dropdown menu for 'Config Name' set to '192.168.157.128'. The main part of the page is a table with columns: 'Config Name', 'Service Description', 'Active', 'Status', 'Actions', and 'ID'. There are two rows of services, both with 'Config Name' '192.168.157.128'. The first row has 'Service Description' 'PING', 'Active' 'Yes', and 'Status' 'Applied'. The second row has 'Service Description' 'PING_copy_1', 'Active' 'No', and 'Status' 'Applied'. In the 'Actions' column, there are icons for search, copy, edit, and delete. The 'copy' icon is circled in blue. Below the table, there is a '+ Add New' button, an 'Apply Configuration' button, a dropdown menu set to 'With checked', a 'Copy' button, and a 'Go' button. At the bottom right, there is a 'Results per page' dropdown set to '15'.

If you wanted to copy multiple hosts, select the desired hosts you want to copy in the left checkbox column and then select **Copy** from the **With checked** drop down list.

After creating a copy, the duplicate host(s) 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.

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To rename and activate the copied host click the **Modify** icon.

The screenshot shows the 'Services' page in Nagios XI. At the top, there is a search bar with '128' and a dropdown menu for 'Config Name' set to '192.168.157.128'. Below this is a table with columns: Config Name, Service Description, Active, Status, Actions, and ID. Two services are listed:

Config Name	Service Description	Active	Status	Actions	ID
192.168.157.128	PING	Yes	Applied	[Modify] [Copy] [Duplicate] [Delete]	120
192.168.157.128	PING_copy_1	No	Applied	[Modify] [Copy] [Duplicate] [Delete]	121

The 'Modify' icon for the 'PING_copy_1' service is circled in blue. Below the table are buttons for '+ Add New', 'Apply Configuration', 'With checked', and 'Go'. A 'Results per page' dropdown is set to 15.

Change the entry for **Host Name** to a valid name. To activate the host copy, click the **Active** checkbox. Once changes are complete click the **Save** button. Click to start monitoring the new host.

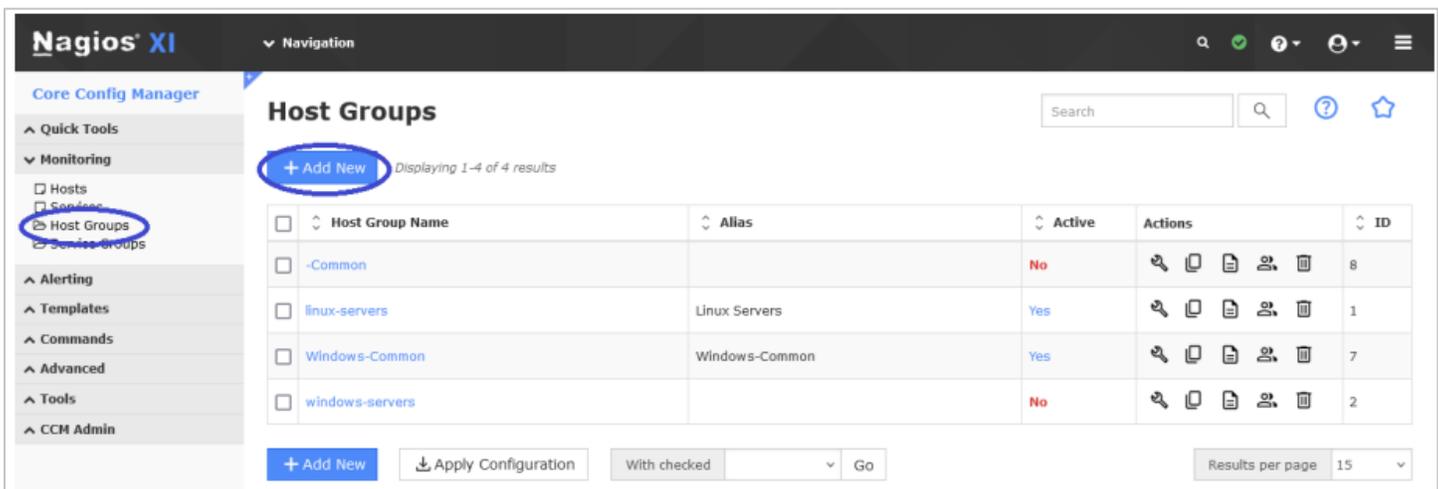
The screenshot shows the 'Service Management' page for the 'PING_copy_1' service. The 'Host Name' field is circled in blue. The 'Active' checkbox is checked. The 'Check command' is 'check_ping' and the 'Command view' is '\$USER1\$/check_ping -H \$HOSTADDRESS\$ -w \$ARG1\$ -c \$ARG2\$ -p 5'. There are several input fields for arguments (\$ARG1\$ through \$ARG8\$) and buttons for 'Add Arguments', 'Delete Arguments', and 'Run Check Command'. At the bottom, there are 'Save' and 'Cancel' buttons.

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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 (under Monitoring) from the **Core Config menu** and clicking the **+ Add New** button.

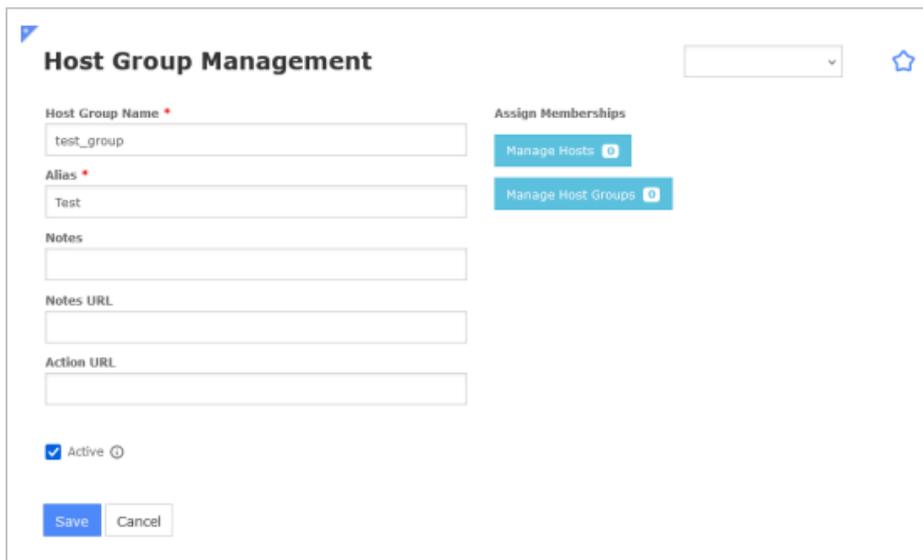


The screenshot shows the Nagios XI Core Config Manager interface. On the left, the 'Monitoring' menu is expanded, and 'Host Groups' is selected. In the main area, the 'Host Groups' page is displayed with a '+ Add New' button circled in blue. Below the button is a table listing existing host groups:

<input type="checkbox"/>	Host Group Name	Alias	Active	Actions	ID
<input type="checkbox"/>	-Common		No	    	8
<input type="checkbox"/>	linux-servers	Linux Servers	Yes	    	1
<input type="checkbox"/>	Windows-Common	Windows-Common	Yes	    	7
<input type="checkbox"/>	windows-servers		No	    	2

At the bottom of the table, there are buttons for '+ Add New', 'Apply Configuration', and 'With checked' followed by a 'Go' button. The 'Results per page' is set to 15.

You will need to give the new Host group a name and description.

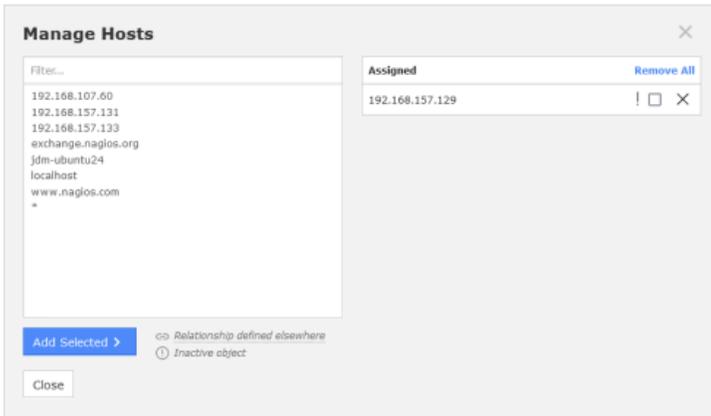


The screenshot shows the 'Host Group Management' form. It includes the following fields and options:

- Host Group Name**: A text input field containing 'test_group'.
- Alias**: A text input field containing 'Test'.
- Notes**: A text area for additional information.
- Notes URL**: A text input field for a URL to the notes.
- Action URL**: A text input field for an action URL.
- Active**: A checked checkbox with a help icon.
- Assign Memberships**: Two buttons: 'Manage Hosts' and 'Manage Host Groups'.
- Buttons**: 'Save' and 'Cancel' buttons at the bottom left.

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You can add **hosts** or **host groups** to the newly created host group using the **Manage Hosts** button and **Manage Host Groups** buttons.

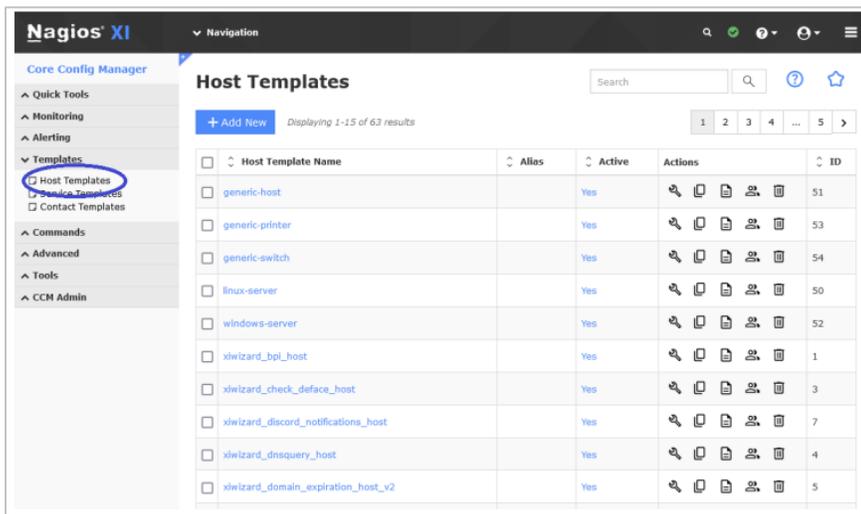


When you are finished click the **Save** button.

Remember to **Apply Configuration** 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 **Templates**. This will bring up the **Host Template Management** page.

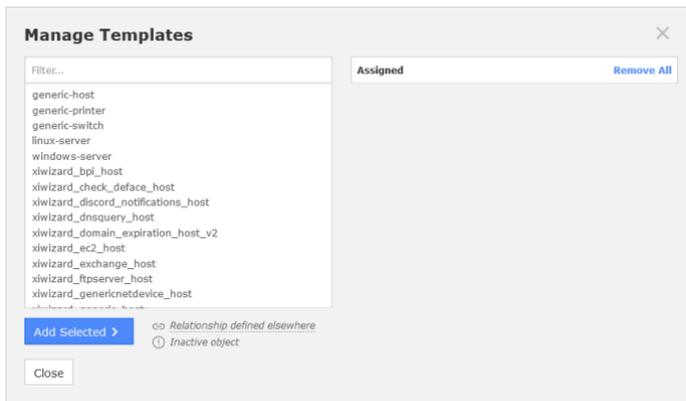


Many administrators prefer to create their own host templates to specify default values for check commands, notification settings, and contact settings. Templates can also inherit values from other templates, which can be useful for creating universal settings for hosts and services.

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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. 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.



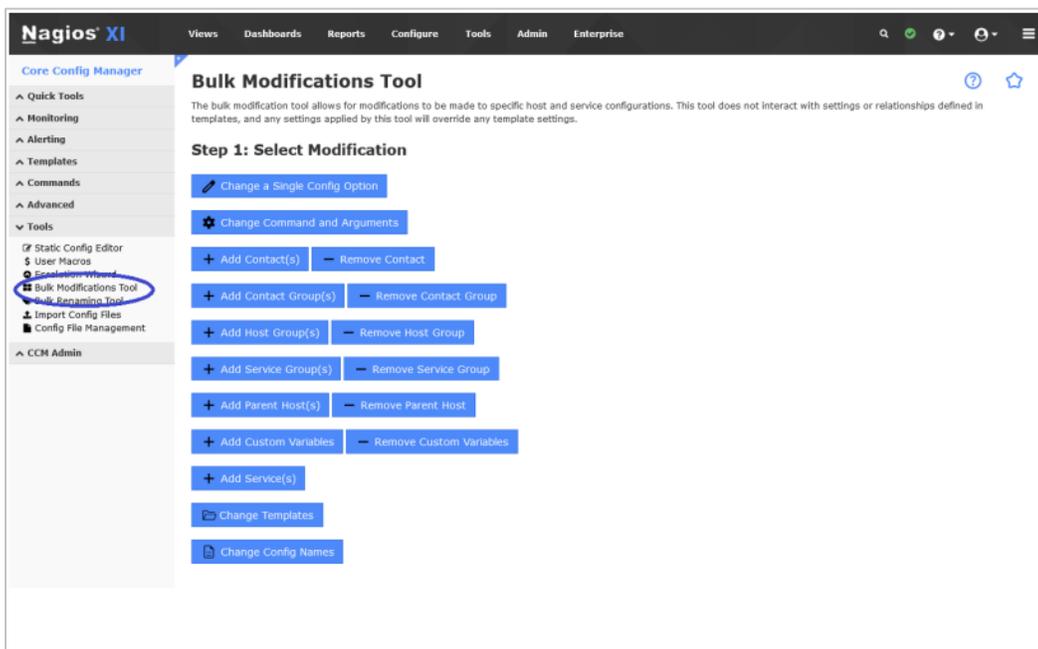
Note: Templates can inherit values from other parent templates. If a template has a parent template assigned via the **Manage Templates** button, it will inherit that template's settings. Be careful when modifying the "**generic**" templates, as these are the main parent templates and this may affect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

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Bulk Modifications Tool

When you need to update a configuration setting for multiple hosts you can use the **Bulk Modifications Tool**, which is located under the **Tools** menu. This allows you to make a change like adding a contact to a selection of hosts, instead of manually editing each host.

The **Bulk Modifications Tool** is available when you have the Nagios XI Enterprise License. If you are not licensed for the Enterprise Edition you can enable a 60 day trial which allows you to use all the features of the **Bulk Modifications Tool**.



Finishing Up

This completes the documentation on how to use the Core Config Manager for host management in Nagios XI. If you have additional questions or other support-related questions, please visit us at our Nagios Support Forum, Nagios Knowledge Base, or Nagios Library:

[Visit Nagios Support Forum](#)

[Visit Nagios Knowledge Base](#)

[Visit Nagios Library](#)