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.

Core Config Manager Overview

Hosts can most easily be set up using the Monitoring Wizard under the main Configure page. 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:

- Adding hosts
- Modifying hosts
- Deleting hosts
- <u>Copying hosts</u>
- <u>Managing host groups</u>
- Using host templates

Adding Hosts

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



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

Hosts Displaying 1-2 of 2 results									0	
+ Add New Q Search										
📄 Host Name 🗧 🖖	Alias C	Active 0	Status 0	Actio	ns					
Linux server	Linux server	Yes	Applied	٩	ø	۵	2.	8	2	
localhost	localhost	Yos	Applied	٩	ø	۵	2	8	1	
With checked v Go						Re	sults p	er page	15	•
+ Add New & Apply Configuration										

3. Click the Add New button to manually add a host.

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4. 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.

Host Mana	gement	
Common Settings	✓ Check Settings Ω Alert Set	ttings Misc Settings
Host Name *	Linux server	Check command
Allas	Linux server	check-host-alive ~
Address •	192.168.242.133	Command view
Display name		\$USER1\$/check_icmp -H \$HOSTADDRESS\$ -w 3000.0,80% -c 5000.0,100% -p 5
୍ଟି Manage Parents		\$ARGI\$
Manage Templates		\$ARG2\$
Manage Host Grou		\$ARG3\$
		\$ARG4\$
Active ()		\$ARG5\$
		\$ARG6\$
		\$ARG7\$
		\$ARG8\$
		Add Arguments
		Run Check Command
Save Cancel		

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- 5. All fields labeled with an asterisk are required fields.
- 6. Use the **Manage Parents** button to associate parent host(s) for the host.
 - a. Parents are used to specify network configuration connections.
- 7. Use the Manage Templates button to associate template(s) to the host.
 - a. Templates provide a method to push the same host setting to similar hosts.
- 8. Use the **Manage Host Groups** button to associate existing host group(s) to the host.
 - a. Host groups are a way to group similar hosts together.
- 9. 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 Configuration Manager until you activate the host object.
- 10. To define the check command for this host, you select the appropriate command from the **Check command** drop down list.
 - a. On the previous screenshot of the **Common Settings** tab, you will see that check-hostalive 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.
 - c. For more detailed descriptions of Nagios commands see the following documentation: <u>https://assets.nagios.com/downloads/nagioscore/docs/nagioscore/4/en/objectdefinitions.html#command</u>
- 11. The **Check Settings** tab allows you to specify the settings for frequency of checks and the host state.

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Common Settings Check Setting	ngs 🋕 Alert Setting	gs Misc Settings	
Initial state		Obsess over host	
Down Up Unreachable		On Off Sktp Null	
Check Interval	min	Event handler	
Retry Interval	min		
Max check attempts * 5	attempts	Event handler enabled	
		On Off Skip Null	
Active checks enabled		Low flap threshold	
On Off Skdp Null			%
Passive checks enabled		High flap threshold	
On Off Skip Null			%
Check period		Flap detection enabled	
24x7	~	On Off Skip Null	
Freshness threshold		Flap detection options	
	sec	Down Up Unreachable	
Check freshness		Retain status information	
On Off Skip Null		On Off Skip Null	
		Retain non-status information	
		On Off Skip Null	
		Process perf data	
		On Off Skip Null	

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

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- b. If you look at the previous **Manage Templates** screenshot, you will see the template xiwizard_genericnetdevice_host is being used, which has these settings applied (as well as that template using another template).
- 13. The Alert Settings tab allows you to specify your notification settings.

Host Management	
🔅 Common Settings 🗸 Check Settings 🛕 Alert Settings	Misc Settings
ి Manage Untacts 0 ని. Manage Contact Groups 0	
Notification period *	
24x7	•
Notification options	
Down Unreachable Recovery Flapping Scheduled Downtime	
Notification interval	
	min
First notification delay	
	min
Notification enabled	
On Off Skip Null	
Stalking options	
Down Up Unreachable Notification None	
Save Cancel	

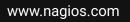
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14. Use the **Manage Contacts** and **Manage Contact Groups** buttons to associate your existing contacts and contact groups with this host.

Host Management	
🚯 Common Settings 🧹 Check Settings 🗘 Alert Settings	Misc Settings
Notes	2D coords
	ху
VRML Image	3D coords
	худ
Notes URL	Custom Variables
	Add, remove, or edit the custom variables for this object.
Status Image	🔲 Manage Custom Variables 0
Action URL	Use this configuration as a template
	Setting the Generic name allows you to use this host as a template (in the Manage Templates modal) for other host object
Icon Image	definitions. We recommend making a new template instead of using this option.
	Generic name
Icon Image 'alt' text	
Save	

- 15. The **Misc Settings** tab is for defining additional host information and can be used for adding notes, icon images, and for setting Free variable definitions.
 - a. There are a few important things that you should note about Free variables (custom object variables):
 - i. Custom variable names must begin with an underscore (_) to prevent name collision with standard variables.
 - ii. Custom variable names are case-insensitive
 - iii. Custom variables are inherited from object templates like normal variables
 - iv. Scripts can reference custom variable values with macros and environment variables
 - v. For additional information about using custom object variables see the following document: <u>Understanding Nagios XI Notification Variables</u>





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- 16. Once you've finished entering information for your new host, click the **Save** button to return to the **Host Management** page.
- 17. Click **Apply Configuration** to restart Nagios XI and put the new settings info effect. Nagios XI will verify the settings and display a success message that the host was set up correctly.

Modifying Hosts

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

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

Deleting / Deactivating Hosts

- 1. Host can be deleted by selecting the **Delete** icon from the **Host Management** page.
- 2. 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.
- 3. Hosts can be activated or deactivated by clicking on the **Yes** or **No** link under the **Active** column.
 - a. 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 dropdown list.
- Note: Hosts can only be deleted/deactivated once their dependent services are also deleted/deactivated.
- 4. To see if a host has dependencies click the **Relationships** icon to check for dependencies.

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bject relationships	Dependent relationshi	ps denoted by GD
Hostgroups 1	Hosttemplates 🚺	C Services 13
Config Name		Service Descriptio
localhost		co PING
localhost		Root Partition
localhost		🛥 Current Users
localhost		Total Processes
localhost		co Current Load
localhost		👄 Swap Usage
localhost		co Memory Usage
localhost		co SSH

- 5. This information will be displayed in a pop-up window. In the screenshot you can see this host has multiple services that prevent it from being deleted or de-activated.
- 6. To delete a host with dependencies, make sure all the services assigned to this host are deleted first.
- 7. To remove dependent services, click the **Services** link to bring up the **Service Management** page.

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

Services Displaying 1-12 of 12	results										0 1
Config Name	Test Linux	Sortor ~									
+ Add New	٩	Search									
Config Na	ime C		Service Description 0	Active 0	Status 0	Action	ns				
Test Linux	k Server		/ Disk Usage	Yes	Applied	٩	ø	۵	2.	8	23
Test Linux	k Server		CPU Stats	Yes	Applied	٩	ø	۵	2	8	17
Test Linux	k Server		Cron Scheduling Daemon	Yes	Applied	٩	ø	۵	2.	۵	25
Test Linux	k Server		Load	Yes	Applied	٩	ø	۵	2	8	16

9. 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.

```
Dataset successfully deleted. Affected rows: 1
Host file: WSE01.box293.local.cfg was deleted
```

10. Once all dependent services have been 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 a

*	
	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.

success message at the top of the page.

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

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11. Once the host is deleted, be sure to click **Apply Configuration** 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.

- 1. To copy a host, click the **Copy** icon from the **Host Management** page for the host you want to copy.
- 2. 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.

+ Add New Q Search									
Host Name 🗘	Alias 0	Active 0	Status 0	Actio	ns				
Linux server	Linux server	Yes	Applied	ঝ	ø	۵	2	8	2
Test Linux Server		Yes	Applied	4	ø	6	2.	8	3
Test Linux Server_copy_1		No		4	ø	۵	2.	8	4
localhost	localhost	Yes	Applied	থ	ø	₿	2.	8	1
With checked v Go						Ro	sults p	er page	15

- 4. To rename and activate the copied host click the Modify icon.
- 5. Change the entry for Host Name to a valid name.
- 6. You will also need to change the address to the address of the new host that will be monitored.
- 7. To activate the host copy, click the **Active** checkbox.
- 8. Once changes are complete click the **Save** button.
- 9. Click Apply Configuration to start monitoring the new host.

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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.

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1. You can define new host groups by selecting the **Host Groups** menu item (under Monitoring) from the Configuration menu and clicking the **+ Add New** button.

N	ССМ		System Status		Search Nag	los XI	Ct	rt K	Changelog	•	9	:
↑ 	Quick Tools Monitoring Hosts Services		Host Groups Displaying 1-4 of 4 results + Add New Q Search	sh						0		
¢ ©	Host Groups Service Groups		Host Group Name 🗘	Alias 🗘	Active 🗘	Action	IS			ID		
4	Alerting		-Common		No	ಶಿ			0	8		
•	Templates Commands		Uinux-servers Windows-Common	Linux Servers Windows-Common	Yes	ನ ನ			Ū Ū	1		
9	Advanced		windows-servers		No	್) a	Û	2		
	Tools CCM Admin		With checked ~ + Add New Apply Cont	Go				Results	per page	15		
Man	age Hosts											×
Fitte				Assigned							Remov	ve All
0 Tr	Linux Server Ist Linux Server_copy_1 Nost			Linux server						!		×
Add Clos	Selected > () Inactive of	hip defined el Ibject	sewhere									

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

Host Group Management	
Host Group Name *	Assign Memberships
Linux hosts	Manage Hosts 0
Alias •	Manage Host Groups 0
Important linux hosts	
Notes	
Notes URL	
Action URL	
Active ①	
Save Cancel	

- 3. You can add hosts or host groups to the newly created host group using the **Manage Hosts** button and **Manage Host Groups** buttons.
- 4. When you are finished click the **Save** button.
- 5. Remember to **Apply Configuration** when you are done making configuration changes.

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Using Host Templates

Host templates can be created by selecting the Host Templates link from the **Configuration** menu templates. This will bring up the **Host Template Management** page.

Host Templates Displaying 1-15 of 62 results								0	
+ Add New Q Search						1 2	34	- 5	>
Host Template Name 0	Allas 0	Active 0	Actio	ns				ID	•
generic-host		Yes	4	ø	۵	21	8	51	
generic-printer		Yes	4	٥	۵	2.	8	53	
generic-switch			4	ø	۵	2	8	54	

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.

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 <u>Adding Hosts</u> 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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Manage Templates	×
Filter	Assigned Remove All
generic-host	
generic-printer	
generic-switch	
linux-server	
windows-server	
xlwlzard_bpl_host	
xlwlzard_check_deface_host	
xlwtzard_discord_notifications_host	
xlwlzard_dnsquery_host	
xtwtzard_domain_expiration_host_v2	
xlwlzard_ec2_host	
Add Selected >Relationship defined elsewhere inactive object	
Close	

When you need to update a configuration setting for multiple hosts you can use the **Bulk Modifications Too**l, 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 30-day trial which allows you to use all the features of the Bulk Modifications Tool.

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The screenshot below shows the location and options of the **Bulk Modifications Tool**.

Bulk Modifications Tool
The bulk modification tool allows for modifications to be made to specific host and service configurations. This tool does not interact with settings or relationships defined in templates, and any settings applied by this tool will override any template settings.
Step 1: Select Modification
Config
Change a Single Config Option Change Command and Arguments
Contacts
+ Add Contact(s) - Remove Contact
Contact Groups
+ Add Contact Group(s) - Remove Contact Group
Host Groups
+ Add Host Group(s) - Remove Host Group
Service Groups
+ Add Service Group(s) - Remove Service Group
Parent Hosts
+ Add Parent Host(s) - Remove Parent Host
Custom Variables
+ Add Custom Variables - Remove Custom Variables
Other
+ Add Service(s) 🗁 Change Templates

Finishing Up

This completes the documentation on Using the Core Config Manager for Host Management in Nagios XI 2024. 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

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