



## Purpose

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

## Target Audience

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

## Core Config Manager Overview

Services 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 service 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 services](#)
- [Modifying services](#)
- [Deleting services](#)
- [Copying services](#)
- [Displaying service information](#)
- [Managing service groups](#)

- [Using service templates](#)

## Adding Services

To manually add a new service, select the **Services** link located under **Monitoring** on the left menu of CCM. This will bring up the **service Management** page, which displays a list of the current services being monitored by Nagios XI.

The screenshot shows the Nagios XI Core Config Manager (CCM) interface. The top navigation bar includes Home, Views, Dashboards, Reports, Configure, Tools, Help, and Admin. The left sidebar shows the navigation menu with 'Services' highlighted under the 'Monitoring' section. The main content area displays a table of services with the following columns: Config Name, Service Description, Active, Status, Actions, and ID. The table contains 15 rows of service data. At the bottom of the table, there are buttons for '+ Add New', 'Apply Configuration', and a search filter 'With checked'. The page also includes a search bar and pagination controls.

<input type="checkbox"/>	I Config Name	I Service Description	I Active	I Status	Actions	I ID
<input type="checkbox"/>	10.10.10.10	Humidity	Yes	Applied		539
<input type="checkbox"/>	10.10.10.10	Illumination	Yes	Applied		540
<input type="checkbox"/>	10.10.10.10	Ping	Yes	Applied		537
<input type="checkbox"/>	10.10.10.10	Temperature	Yes	Applied		538
<input type="checkbox"/>	10.25.13.10	PING	Yes	Applied		588
<input type="checkbox"/>	10.25.13.15	Ping	Yes	Applied		675
<input type="checkbox"/>	10.25.13.15	Port 2 Bandwidth	Yes	Applied		676
<input type="checkbox"/>	10.25.13.15	Port 2 Status	Yes	Applied		677
<input type="checkbox"/>	10.25.14.10	Check Dummy	Yes	Applied		924
<input type="checkbox"/>	10.25.14.10	CPU Usage	Yes	Applied		917
<input type="checkbox"/>	10.25.14.10	Disk Usage on C:/	Yes	Applied		920
<input type="checkbox"/>	10.25.14.10	Ethernet0 Bandwidth - Inbound	Yes	Applied		922
<input type="checkbox"/>	10.25.14.10	Ethernet0 Bandwidth - Outbound	Yes	Applied		921
<input type="checkbox"/>	10.25.14.10	Memory Usage	Yes	Applied		918
<input type="checkbox"/>	10.25.14.10	Service Status: MSDTC	Yes	Applied		923

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

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

## Service Management

⚙️ Common Settings
✓ Check Settings
🔔 Alert Settings
Misc Settings

**Config Name \***

**Description \***

**Display name**

**Check command**

**Command view**

```
$USER1$/check_ping -H $HOSTADDRESS$ -w $ARG1$ -c $ARG2$
```

\$ARG1\$	3000,80%
\$ARG2\$	5000,100%
\$ARG3\$	
\$ARG4\$	
\$ARG5\$	
\$ARG6\$	
\$ARG7\$	
\$ARG8\$	

▶ Run Check Command

Manage Hosts 1
Manage Templates 1
Manage Host Groups 0
Manage Servicegroups 0

Active  ⓘ

Save
Cancel

This tab allows you to define the primary service parameters such as Config Name, Description, and Display name.

All fields labeled with an asterisk are required fields. Note that the **Active** check box is checked, this enables the service. If this box is un-checked the service configuration won't be put into production when Apply Configuration is performed. However the settings will remain in CCM until you activate the service object.

If you want to add a check for this service, you could select the appropriate command (such as `check_icmp`). Every command in the **Check command** drop down list is associated with a set of Nagios Core commands and arguments. For more detailed descriptions of Nagios commands see the following documents:

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

### [Managing Plugins In Nagios XI](#)

Use the **Manage Hosts** button to associate the service with a host.

Services must be associated with at least one host for them to be valid (can be via a Hostgroup).

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

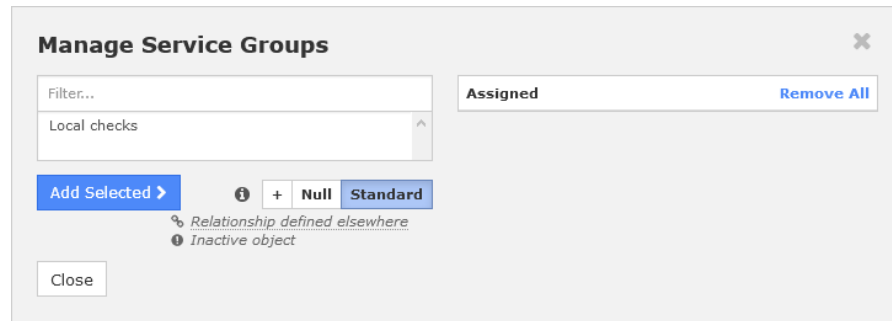
Templates provide a method to push the same service settings to similar services.

Use the **Manage Host Groups** button to associate existing host group(s) to the service.

Host groups are a way to assign a service to multiple hosts dynamically.

Use the **Manage Servicegroups** button to add this service to an existing servicegroup.

Servicegroups are a way of creating a collection of services to for purposes such as viewing them in the main interface.



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

If a problem is detected, 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 service 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_ping_service` is being used, which has these settings applied (as well as that template using another template).

## Service Management

Common Settings
 Check Settings
Alert Settings
Misc Settings

**Initial state**

Warning Critical Ok Unknown

**Check interval**

5 min

**Retry interval**

1 min

**Max check attempts \***

5 attempts

**Active checks enabled**

On Off Skip Null

**Passive checks enabled**

On Off Skip Null

**Check period \***

xi\_timeperiod\_24x7

**Freshness threshold**

sec

**Check freshness**

On Off Skip Null

**Obsess over service**

On Off Skip Null

**Event handler**

**Event handler enabled**

On Off Skip Null

**Low flap threshold**

%

**High flap threshold**

%

**Flap detection enabled**

On Off Skip Null

**Flap detection options**

Critical Warning Ok Unknown

**Retain status information**

On Off Skip Null

**Retain non-status information**

On Off Skip Null

**Process perf data**

On Off Skip Null

**Is Volatile**

On Off Skip Null

Save
Cancel

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

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

## Service Management

⚙️ Common Settings
✓ Check Settings
🔔 Alert Settings
Misc Settings

👤 Manage Contacts 0
👥 Manage Contact Groups 0

**Notification period \***

xi\_timeperiod\_24x7 ▼

**Notification options**

Warning Critical Unknown Recovery Flapping

Scheduled Downtime

**Notification interval**

60 min

**First notification delay**

min

**Notification enabled**

On Off Skip Null

**Stalking options**

Warning Critical Ok Unknown Notification None

Save
Cancel

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

## Service Management

⚙️ Common Settings
✓ Check Settings
🔔 Alert Settings
Misc Settings

**Notes**

**VRML image**

**Notes URL**

**Status image**

**Action URL**

**Icon image**

**Icon image 'alt' text**

**2D coords**

**3D coords**

☰ Manage Free Variables 0

**Use this configuration as a template**

**Generic name**

Save
Cancel

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


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 service, click the **Save** button to return to the service 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 service was set up correctly.

## Modifying Services

Services can be modified by clicking the **Modify** icon  OR the config name itself from the **Service Management** page.

↑ Active	↑ Status	Actions	↓ ID
Yes	Applied	   	588

This will bring up the same set of tabbed menus covered in the [Adding services](#) section of this tutorial. Refer to that section for a detailed walk through of the tabs that control service settings.



## Deleting / Deactivating Services

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

↓ Active	↓ Status	Actions	↓ ID
Yes	Applied	    	588

Services can be activated or deactivated by clicking on the **Yes** or **No** link under the **Active** column.

↓ Active	↓ Status
<a href="#">Yes</a>	Applied
<a href="#">No</a>	Applied
<a href="#">Deactivate</a>	Applied

↓ Active	↓ Status
<a href="#">No</a>	-
<a href="#">Yes</a>	Not Applied
<a href="#">Activate</a>	Not Applied

Deactivating a service is the same as deleting it as far as the monitoring engine is concerned, but this does preserve the service's configuration within Nagios XI if you want to recover it later.

Multiple services can be also be deleted / deactivated by selecting the desired services in the **left checkbox column** and then selecting the action from the **With checked** drop down list.

## Services


[+ Add New](#)

Displaying 1-14 of 14 results

 Config Name 

<input type="checkbox"/>	↓ Config Name	↓ Service Description	↓ Active	↓ Status	Actions	↓ ID
<input checked="" type="checkbox"/>	centos01	/ Disk Usage	Yes	Applied	    	53
<input checked="" type="checkbox"/>	centos01	CPU Stats	Yes	Applied	    	47
<input checked="" type="checkbox"/>	centos01	Cron Scheduling Daemon	Yes	Applied	    	55
<input type="checkbox"/>	centos01	Disk Usage	Yes	Applied	    	910
<input type="checkbox"/>	centos01	Dummy Test	Yes	Applied	    	590

[+ Add New](#)


With checked



Results per page





**Important Note:** Services can only be deleted/deactivated once any service dependencies/escalations/group\_membership are also deleted/deactivated/modified.



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

## Services

+ Add New *Displaying 1-1 of 1 results* Config Name 10.25.13.10

<input type="checkbox"/>	↑ Config Name	↑ Service Description	↑ Active	↓ Status	Active Relationships	↓ ID
<input type="checkbox"/>	10.25.13.10	PING	Yes	Applied	   	588

+ Add New Apply Configuration With checked Go Results per page 15

**PING** ×

Object relationships Dependent relationships denoted by %

Servicedependencies 1
 Servicegroups 1
 Hosts 1
 Servicetemplates 1

Important

This information will be displayed in a pop-up window. In the screenshot above you can see this service belongs to a dependency that prevents it from being deleted or deactivated.

## Copying Services









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

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

↑ Active	↓ Status	Actions	↓ ID
Yes	Applied	   	588

If you wanted to copy multiple services, select the desired services you want to copy in the left checkbox column and then select **Copy** from the **With checked** drop down list (same as demonstrated in the [deleting / deactivating services](#) section).

After a creating a copy, the duplicate service(s) will be appended with a service description of `_copy_x` that will need to be changed. Copies are also inactive by default, and will need to be activated for monitoring use.

<input type="checkbox"/>	↓ Config Name	↓ Service Description	↓ Active	↓ Status	Actions	↓ ID
<input type="checkbox"/>	10.25.13.10	PING	Yes	Applied	   	588
<input type="checkbox"/>	10.25.13.10	PING_copy_1	No	-	   	1085

To rename and activate the copied service click the **Modify** icon. Change the entry for **description** to a valid name.

If you are going to use this service with another host then you'll need to change the host using the **Manage Hosts** button.

To activate the copied service, click the **Active** checkbox. Once changes are complete click the **Save** button then click **Apply Configuration** to start monitoring the new service.

## Displaying Service Information

The Information icon displays a service's database information and any related dependencies. This is demonstrated in the [deleting / deactivating services](#) section.

## Managing Service Groups

Service Groups allow you to group services 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 service groups by selecting the **service 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 is a navigation menu with sections: Quick Tools, Monitoring (containing Hosts, Services, Host Groups, and Service Groups), and Alerting (containing Contacts, Contact Groups, Time Periods, and Host Escalations). The 'Service Groups' link is circled in blue. The main content area is titled 'Service Groups' and includes a search bar, a '+ Add New' button, and a table of existing service groups. Below the table are buttons for '+ Add New', 'Apply Configuration', and a 'Go' button. At the bottom right, there is a 'Results per page' dropdown set to 30.

<input type="checkbox"/>	↑ Service Group Name	↑ Alias	↑ Active	Actions	↑ ID
<input type="checkbox"/>	QNAP01	QNAP01	No		1
<input type="checkbox"/>	YUM	YUM	Yes		2

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

You can add **services** or **service groups** to the newly created service group using the **Manage services** button and **Manage service Groups** buttons.

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

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

## Service Group Management

**Service Group Name \***

**Description \***

**Notes**

**Notes URL**

**Action URL**

Active ⓘ

**Assign Memberships**

## Using Service Templates

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

Many administrators prefer to create their own service 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 services and services.

**Service Templates**

generic

+ Add New *Displaying 1-3 of 3 results*

<input type="checkbox"/>	Service Template Name	Display Name	Active	Actions	ID
<input type="checkbox"/>	generic-service		Yes		50
<input type="checkbox"/>	xiwizard_genericnetdevice_ping_service		Yes		55
<input type="checkbox"/>	xiwizard_generic_service		Yes		2

+ Add New   Apply Configuration   With checked   Go   Results per page 15

From the **service Template Management** page, you can add, modify, copy, or delete existing templates. Nagios XI comes with an existing selection of service templates that can be used or modified for your monitoring needs. The **Service Template Management** page uses the same layout and menu system as the **Service Management** page. See the above section on [Adding services](#) 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 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.

## Bulk Modifications Tool

When you need to update a configuration setting for multiple services 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 services, instead of manually editing each service.

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.

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

The screenshot displays the Nagios XI Core Config Manager (CCM) interface. The left sidebar shows the navigation menu with the 'Bulk Modifications Tool' option highlighted. The main content area is titled 'Bulk Modifications Tool' and includes a description: '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.' Below the description, the 'Step 1: Select Modification' section lists several actions:

- Change a Single Config Option
- Change Command and Arguments
- Add Contact(s) / Remove Contact
- Add Contact Group(s) / Remove Contact Group
- Add Host Group(s) / Remove Host Group
- Add Parent Host(s) / Remove Parent Host
- Add Free Variables / Remove Free Variables
- Add Service(s)
- Change Templates
- Change Config Names

## Finishing Up

This completes the documentation on using CCM for service management in Nagios XI.

If you have additional questions or other support related questions, please visit us at our Nagios Support Forums:

<https://support.nagios.com/forum>

The Nagios Support Knowledgebase is also a great support resource:

<https://support.nagios.com/kb>