



Purpose

This document describes how exclude hosts and host groups in Nagios XI using Core Configuration Manager (CCM).

Target Audience

This document is intended for use by Nagios Administrators who would like an understanding of how to exclude hosts or host groups.

Overview

Excluding hosts or host groups in CCM allows for flexible monitoring configurations. A use case is when you have a common service assigned to multiple hosts. One of those hosts might not require that common service, this is where the exclude functionality is useful.

The exclude functionality applies to services, service templates, host groups, service escalations, and host escalations.

The exclude capability was added in Nagios XI 5.3.0, previous versions do not include this functionality.

Common Service Example

To demonstrate how you can use the exclude functionality, here is an example of a common service that has been applied to a host group:

Host	Service	Status	Duration	Attempt	Last Check	Status Information
centos12	CPU Stats	Ok	1h 38m 11s	1/5	2017-05-01 13:04:25	CPU STATISTICS OK: user=0.00% system=0.00% iowait=0.00% idle=100.00%
centos16	CPU Stats	Critical	1m 22s	2/5	2017-05-01 13:06:04	(Return code of 255 is out of bounds)
centos19	CPU Stats	Ok	1h 32m 55s	1/5	2017-05-01 13:03:30	CPU STATISTICS OK: user=0.00% system=0.00% iowait=0.00% idle=100.00%
centos21	CPU Stats	Ok	1h 34m 28s	1/5	2017-05-01 13:01:58	CPU STATISTICS OK: user=0.00% system=0.00% iowait=0.20% idle=99.80%
centos22	CPU Stats	Ok	1h 34m 39s	1/5	2017-05-01 13:01:50	CPU STATISTICS OK: user=0.00% system=0.00% iowait=0.00% idle=100.00%

In the screenshot on the previous page you can see the service `CPU Stats` for the host `centos16` has a critical status. Here is a screenshot of the service in CCM (**Monitoring > Services**):

Service Management

⚙️ Common Settings
✓ Check Settings
🔔 Alert Settings
Misc Settings

Config Name *

Description *

Display name

Check command

Command view

```
$USER1$/check_nrpe -H $HOSTADDRESS$ -t 30 -c $ARG1$ $ARG2$
```

Manage Hosts 0

←

Manage Templates 1

Manage Host Groups 1

←

Manage Servicegroups 0

You can see that the **Manage Hosts** button has a number 0 which indicates that this service is not assigned to hosts directly. The **Manage Host Groups** button has a number 1 which indicates that it has been assigned to a host group. Clicking the **Manage Host Groups** button will display a popup window.

Here you can see that the host group `Common_Linux` is being used.

Manage Host Groups ✕

Filter..

- linux-servers
- Linux_CPU_Stats_Exclude
- 🕒 windows-servers
- *

Add Selected >

🔗 Relationship defined elsewhere
🕒 Inactive object

Close

Assigned Remove All

Common_Linux ! □ ✕

+ Null Standard

Here's the list of members in the
Common_Linux group:

Manage Hosts

Filter..

localhost
*

Assigned Remove All

centos12	! □	✖
centos16	! □	✖
centos19	! □	✖
centos21	! □	✖
centos22	! □	✖

Add Selected > Relationship defined elsewhere
Inactive object

Close

In those past four screenshots you can see how a common service was assigned to multiple hosts. A common services allows you to have one service definition applied to many hosts. If you wanted to adjust any of the service directives, making the change on the common service means that all the hosts will get the updated directive.

The goal of the following examples will show you how you can exclude the host `centos16` from the `CPU Stats` service.

Obviously you could just remove the host `centos16` from the `Common_Linux` group, however in this scenario the `Common_Linux` group is being used for other common services. If you were to remove the host `centos16` from the `Common_Linux` group then all those other common services would not be assigned to the host `centos16`.

Being able to exclude a host from a service allows you to make exclusions on a case-by-case basis.

Exclude Hosts

Using the `CPU Stats` service as the example, when editing the service in CCM click the **Manage Hosts** button.

Config Name *
Common_Linux

Description *
CPU Stats

Display name

Manage Hosts 0

Manage Templates 1

Manage Host Groups 1

Manage Servicegroups 0

In the left pane select the `centos16` host and click the **Add Selected >** button.

In the right pane **check** the box to exclude this host from being assigned this service.

Click the **Close** button, **Save** the service and then **Apply Configuration**.

Manage Hosts

- centos12
- centos19
- centos21
- centos22
- localhost
- *

Relationship defined elsewhere
Inactive object

Assigned Remove All

centos16	<input checked="" type="checkbox"/>	<input type="checkbox"/>
----------	-------------------------------------	--------------------------

Once the apply configuration process is complete you'll see that the `CPU Stats` service no longer exists for the `centos16` host.

Host	Service	Status	Duration	Attempt	Last Check	Status Information
centos12	CPU Stats	Ok	2h 20m 41s	1/5	2017-05-01 13:44:25	CPU STATISTICS OK: user=0.00% system=0.00% iowait=0.00% idle=100.00%
centos19	CPU Stats	Ok	2h 15m 25s	1/5	2017-05-01 13:48:20	CPU STATISTICS OK: user=0.00% system=0.20% iowait=0.00% idle=99.80%
centos21	CPU Stats	Ok	2h 16m 58s	1/5	2017-05-01 13:46:48	CPU STATISTICS OK: user=0.00% system=0.00% iowait=0.00% idle=100.00%
centos22	CPU Stats	Ok	2h 17m 9s	1/5	2017-05-01 13:46:41	CPU STATISTICS OK: user=0.00% system=0.00% iowait=0.00% idle=100.00%

Exclude Host Groups

The last step showed you how to exclude a specific host from a service. Another method is to put the host in a host group and exclude that host group from the service. It does exactly the same thing however it allows for some more flexibility, any host you put in that group will be excluded and can save time, especially if that group is used for excluding in other "common services".

First you need to create a host group. In CCM navigate to **Monitoring > Host Groups**. The following screenshot shows the `Linux_Common_Exclude` host group that was created with the `centos16` host as a member.

Host Group Management

The screenshot displays the Nagios XI Host Group Management interface. The main form shows the following fields:

- Host Group Name ***: `Linux_Common_Exclude`
- Description ***: `Linux_Common_Exclude`
- Notes**: (Empty text area)
- Notes URL**: (Empty text area)
- Action URL**: (Empty text area)
- Active** ⓘ

On the right, under **Assign Memberships**, there are two buttons: **Manage Hosts** (with a '1' badge) and **Manage Host Groups** (with a '0' badge). A blue arrow points from the **Manage Hosts** button to a modal dialog box titled **Manage Hosts**.

The **Manage Hosts** dialog box contains:

- Filter..**: A search input field.
- Host List**: A list of hosts: `centos12`, `centos19`, `centos21`, `centos22`, `localhost`, and `*`.
- Assigned**: A list containing `centos16`. To the right of `centos16` is an unchecked checkbox and a red 'X' icon. A blue box highlights this area.
- Buttons**: **Add Selected >**, **Close**, **Save**, and **Cancel**.
- Legend**:
 - Relationship defined elsewhere
 - Inactive object

Pay attention that the exclude check box has NOT been checked here, we are simply creating a group of hosts and the exclusion will be done on the service.

Edit the service and click the **Manage Host Groups** button.

Config Name *
Common_Linux

Description *
CPU Stats

Display name

Manage Hosts 0

Manage Templates 1

Manage Host Groups 1

Manage Servicegroups 0

In the left pane select the Linux_Common_Exclude host group and click the **Add Selected >** button.

In the right pane **check** the box to exclude this host group from being assigned to this service.

Click the **Close** button, **Save** the service and then **Apply Configuration**.

Once the apply configuration process is complete you'll see that the CPU Stats service no longer exists for the centos16 host.

Host	Service	Status	Duration	Attempt	Last Check	Status Information
centos12	CPU Stats	Ok	2h 20m 41s	1/5	2017-05-01 13:44:25	CPU STATISTICS OK: user=0.00% system=0.00% iowait=0.00% idle=100.00%
centos19	CPU Stats	Ok	2h 15m 25s	1/5	2017-05-01 13:48:20	CPU STATISTICS OK: user=0.00% system=0.20% iowait=0.00% idle=99.80%
centos21	CPU Stats	Ok	2h 16m 58s	1/5	2017-05-01 13:46:48	CPU STATISTICS OK: user=0.00% system=0.00% iowait=0.00% idle=100.00%
centos22	CPU Stats	Ok	2h 17m 9s	1/5	2017-05-01 13:46:41	CPU STATISTICS OK: user=0.00% system=0.00% iowait=0.00% idle=100.00%

Service Templates

Hosts and host groups can also be excluded in Service Templates. The steps are identical to a service however take care as you will be creating dependencies. When you exclude a host in a service template, if you want to delete that host later on you will to remove it from the service template first. It is advisable to use a host group in templates as it does not create a direct dependency.

Escalations

Hosts and service escalations can also exclude hosts and host groups. Escalations are a separate topic not covered in this documentation, please refer to the following for more information:

<https://assets.nagios.com/downloads/nagiosxi/docs/Understanding-Nagios-XI-Notification-Escalations.pdf>

Finishing Up

This completes the documentation on how to exclude hosts and services 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>