Purpose

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

Core Config Manager Overview

Services can most easily be set up 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:

- <u>Adding services</u>
- Modifying services
- <u>Deleting services</u>
- <u>Copying services</u>
- Displaying service information
- <u>Managing service groups</u>
- Using service templates

Adding Services

This document will discuss how to do the following items:

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

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

| Services Displaying 1-15 of 25 results | | | | | | | | | 0 | |
|---|------------------------|------------|----------|--------|----|---|----|---|-----|-----|
| Config Name ~ | | | | | | | | | | |
| + Add New Q Search | | | | | | | | | 1 2 | 2 > |
| Config Name 0 | Service Description 0 | Active 0 | Status 0 | Action | ns | | | | 10 | o o |
| Test Linux Server | / Disk Usage | Yes | Applied | থ | ø | ₿ | 8 | ۵ | 2 | 3 |
| Test Linux Server | CPU Stats | Ums | Applied | থ | ø | ₿ | 0° | ۵ | 17 | 7 |
| Test Linux Server | Cron Scheduling Daemon | Yes | Applied | থ | ø | ۵ | ð | ۵ | 2 | 5 |

- 3. Click the Add New button to manually add a new service.
- 4. The Service Management page will open on the Common Settings tab.

| Common Settings V Check Settings | Alert Settings Misc Settings |
|----------------------------------|------------------------------|
| Config Name * | Check command |
| Description * | Command view |
| | No command selected |
| Display name | \$ARGI\$ |
| Manage Hosts 0 | \$ARG2\$ |
| | \$ARG3\$ |
| Manage Templates | \$ARG4\$ |
| Manage Host Groups | \$ARG5\$ |
| Manage Service Groups 0 | \$ARG6\$ |
| Active 🕥 | \$ARG7\$ |
| | \$ARG8\$ |
| | Add Arguments |

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- 5. This tab allows you to define the primary service parameters such as **Config Name**, **Description**, and **Display** name.
- 6. All fields labeled with an asterisk are required fields.

Note: 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 **Configuration Manager** until you activate the service object.

7. 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.ht ml#command

8. 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).

| Manage Hosts | | × |
|---|--------------------|------------|
| Filter | Assigned | Remove All |
| 192.168.107.60 | 192.168.157.129 | ! 🗆 🗙 |
| 192.168.157.131 | | |
| 192.168.157.133 | | |
| exchange.naglos.org | | |
| Jdm-ubuntu24 | | |
| localhost | | |
| www.naglos.com | | |
| | | |
| | | |
| | | |
| Add Selected > 2. Relationship defined elsewhere ① Inactive object | + Null Standard () | |
| Close | | |

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9. 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.

| Manage Templates | | × |
|---------------------------------------|--|------------|
| Filter | Assigned | Remove All |
| generic-service | xiwizard_genericnetdevice_ping_service | ~ × |
| local-service | | |
| xlwizard_bpi_service | | |
| xiwizard_check_deface_service | | |
| xiwizard_check_file_sa_service | | |
| xiwizard_check_file_service | | |
| xiwizard_check_sla2 | | |
| xiwizard_discord_notification_service | | |
| xiwizard_dnsquery_service | | |
| xiwizard_domain_expiration_service_v2 | | |
| Add Selected > | | |

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10. 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.

| Manage Host Groups | | × |
|---------------------------------|-----------------|------------|
| Filter | Assigned | Remove All |
| O-Common | linux-servers | ! 🗆 🗙 |
| Windows-Common | | |
| windows-servers | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| Add Selected > ①Inactive object | + Null Standard | |
| Close | | |
| | | |

11. 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.



| Manage Service Groups | × |
|---------------------------------|---------------------|
| Filter | Assigned Remove All |
| Ping | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| Add Selected > ①Inactive object | + Null Standard |
| Close | |

12. 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).



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

| Service Management | |
|--|---------------|
| 🔅 Common Settings 🗸 Check Settings 🋕 Alert Settings | Misc Settings |
| | |
| 은 Manage Contacts 이 온, Manage Contact Groups 이 | |
| Notification period * | |
| | ~ |
| Notification options | |
| Warning Critical Unknown Recovery Flapping Scheduled Dov | vntime |
| Notification interval | |
| | min |
| First notification delay | |
| | min |
| Notification enabled | |
| On Off Skip Null | |
| Stalking options | |
| Warning Critical Ok Unknown 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 service.

| sc Settings stom Variables remove, or edit the custom variables for this object. Manage Custom Variables |
|--|
| remove, or edit the custom variables for this object. |
| Manage Custom Variables 0 |
| |
| e this configuration as a template by the Generic name allidays you to use this service as a late (in the Manage Templates modal) for other service the development of the temperature of the service |
| t definitions. We recommend making a new template ad of using this option. r ic name |
| |
| |
| 2 0 |

- 15. The **Misc Settings** tab is for defining additional service information and can be used for adding notes, icon images, and for setting Free variable definitions.
- 16. 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: <u>Understanding Nagios XI Notification Variables</u>

17. Once you've finished entering information for your new service, click the **Save** button to return to the service **Management** page.

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18. Click the **Apply Configuration** button to restart Nagios XI and put the new settings info 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.

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

Deleting / Deactivating Services

- 1. Services can be deleted by selecting the Delete icon from the **Service Management** page.
- 2. Services can be **activated** or **deactivated** by clicking on the **Yes** or **No** link under the **Active** column.
- 3. 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.
- 4. Multiple services can 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.

Note: Services can only be deleted/deactivated once any service dependencies/escalations/group_membership are also deleted/deactivated/modified

- 5. To see if a service has dependencies click the Relationships icon to check for dependencies.
- 6. 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.

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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.

- 1. To copy a service, click the **Copy** icon from the service **Management** page for the service you want to copy.
- 2. 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 <u>deleting / deactivating services</u> section).
- 3. After 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.
- 4. To rename and activate the copied service click the **Modify** icon. Change the entry for description to a valid name.
- 5. If you are going to use this service with another host then you'll need to change the host using the **Manage Hosts** button.
- 6. 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 <u>deleting / deactivating services</u> 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.

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1. 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.

| Service Groups Displaying 1-2 of 2 results | | | | | | | | |
|---|-----------------------|----------|--------|----|----|---------|---------|------|
| + Add New U Q Search | | | | | | | | |
| Service Group Name | Allas 🗘 | Active 0 | Action | ns | | | | ID 0 |
| Linux hosts | Important linux hosts | Yes | ಳ | ø | ۵ | De | | 1 |
| Linux hosts_copy_1 | Important linux hosts | No | খ | ø | ۵ | đ | ۵ | 2 |
| With checked V Go | | | | | Re | sults p | er page | 15 🗸 |
| + Add New L Apply Configuration | | | | | | | | |

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

| Service Group Management | |
|--------------------------|-------------------------|
| Service Group Name * | Assign Memberships |
| | Manage Services 0 |
| Alias • | Manage Service Groups 0 |
| Notes | |
| Notes URL | |
| Action URL | |
| Active ① | |
| Save Cancel | |

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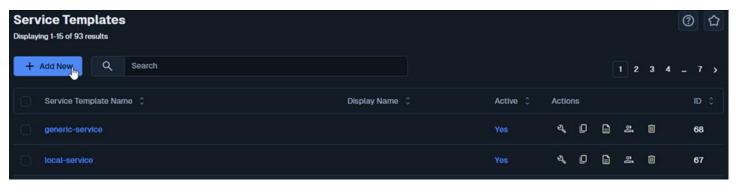
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- 3. You can add services or service groups to the newly created service group using the **Manage services** button and **Manage service Groups** buttons.
- 4. When you are finished click the Save button.
- 5. Remember to **Apply Configuration** when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

Using Service Templates

Service templates can be created by selecting the Service Templates link from the Configuration 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.



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.

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 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 30 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:

| Bulk Modifications Tool | 3 | ជ |
|---|----|---|
| 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 a settings applied by this tool will override any template settings. | nv | |
| 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 📄 Change Config Names | | |

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Finishing Up

This completes the documentation on using the Core Config Manager for service management in Nagios XI in 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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