

The Industry Standard in IT Infrastructure Monitoring

Purpose

This document describes how to use the Bulk Host Cloning and Import Wizard in Nagios XI, as well as some of its limitations, and possible issues that you can run into.

Target Audience

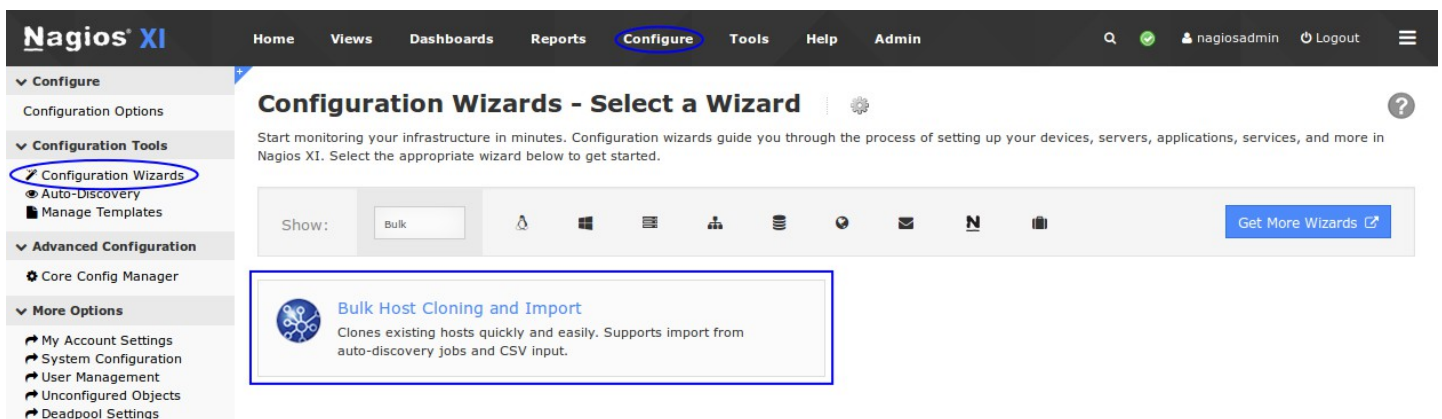
This document is intended for use by Nagios XI Administrators who wish to add multiple hosts to Nagios XI using an existing host as a "template".

Overview

The Bulk Host Cloning and Import wizard allows you to easily create new hosts and services into Nagios XI using CSV formatted data. The new hosts will have services that are replicated to match an already existing host the user selects as a template. This import tool is extremely useful for large environments that want to quickly provision several hosts to be monitored in the same manner.

Running The Configuration Wizard

To begin using the Bulk Host Cloning and Import wizard navigate via the top menu bar to **Configure > Run a configuring wizard**, and select the **Bulk Host Cloning and Import** wizard. In the following screenshot you can see how the search field allows you to quickly find a wizard.



On **Step 1** you are required to select the host that you wish to use as the template that you will clone. On the following screenshot you can see the host **server01** has been selected. Click Next to continue.

Configuration Wizard: Bulk Host Cloning and Import - Step 1

This wizard allows you to clone existing hosts quickly and easily. It supports import of new hosts in bulk. New host information is specified in CSV format and each newly imported host is given the same services as an existing host that is being monitored. This is useful if you setup one host as a template and want to setup several other hosts using the same template.

Template Host Information

Host Name: **server01**

Select an existing host that should be cloned and used as the template for new hosts.

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In **Step 2**, the host you selected to use as the template is shown at the top.

All of the available services from the template host are listed under the **Select Template Services** section. In order to select a service, just check the box next to the service name.

Under the **Import / Cloning Data** section, the drop down lists are the Nagios XI host object directives. These need to be mapped to each field of the CSV data that is provided in the **Data** text area.

The **Data** text area is where you need to paste the CSV list of host you are creating.

Looking at the screenshot to the right you can see that **Field 1 = Address** and **Field 2 = Name**.

Click Next to continue.

Configuration Wizard: Bulk Host Cloning and Import - Step 2

Host Template

server01

Select Service Templates

Specify the services from the template host that should be cloned.

Check All / Uncheck All

- / Disk Usage (Details)
- Load (Details)
- Memory Usage (Details)
- Swap Usage (Details)
- Yum Updates (Details)

Import / Cloning Data

Enter addresses of new hosts that should be created by cloning the template host and services specified above.

Fields: **Field 1** (Address) **Field 2** (Name) **Field 3** (IGNORE) **Field 4** (IGNORE) **Field 5** (IGNORE)

Specify the type of data that is present in the fields of the data below.

Data:

```
10.25.13.56,server02
10.25.13.34,server03
10.25.13.30,server04
10.25.13.37,server05
```

The addresses of new hosts that should be created by cloning the template host and services specified above. Multiple fields should be separated by a comma. One entry per line.

Options: Replace Parent Host and/or Hostgroup with the above selected (if any) instead of adding the given Parent and/or Hostgroup to the new host.

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The remaining wizard steps have no settings, any options that are normally available in for these steps in Configuration Wizards will be inherited from the template host and services you selected. You can click **Finish** on any of the steps or click Next on each step and click **Apply** on the final step.



Configuration Wizard: Bulk Host Cloning and Import - Step 3



Monitoring Settings

Monitoring options will be inherited from the template host and services you selected. Click Next to continue.

[< Back](#) [Next >](#) [✔ Finish](#)



Configuration Wizard: Bulk Host Cloning and Import - Step 4



Notification Settings

Notification options will be inherited from the template host and services you selected. Click Next to continue.

[< Back](#) [Next >](#) [✔ Finish](#)



Configuration Wizard: Bulk Host Cloning and Import - Step 5



Group membership will be inherited from the template host and services you selected unless you put hostgroup and/or parent host relationship data in. Click Next to continue.

[< Back](#) [Next >](#) [✔ Finish](#)



Configuration Wizard: Bulk Host Cloning and Import - Final Step



Final Settings

Click **Apply** to add your new configuration.

[< Back](#) [✔ Apply](#) [Save as Template](#)

Once the configuration wizard has completed you will now be monitoring the objects you provided in your CSV data.

Nagios XI – How To Use The Bulk Host Cloning And Import Wizard

The following screenshot shows the newly monitored host and services based on the data provided on step 2 (as well as the original host).

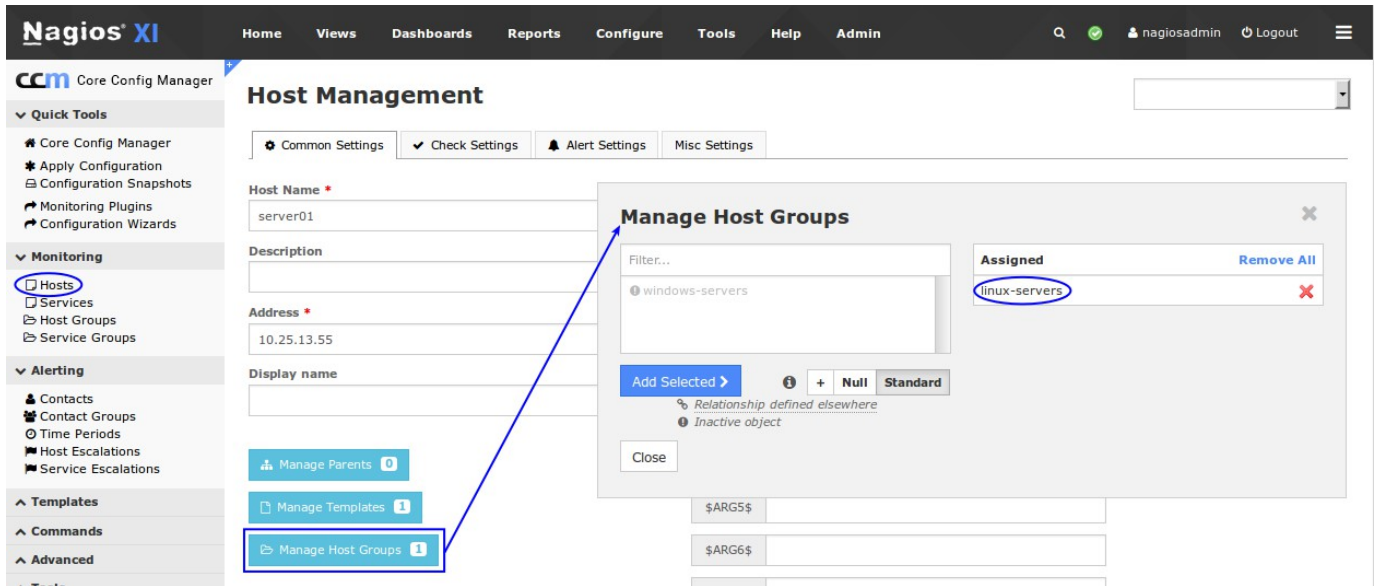
Host	Service	Status	Duration	Attempt	Last Check	Status Information
server01	/ Disk Usage	Ok	16h 28m 49s	1/5	2017-01-31 09:58:02	DISK OK - free space: / 9809 MB (87% inode=98%):
	Load	Ok	16h 28m 15s	1/5	2017-01-31 09:58:41	OK - load average: 0.24, 0.26, 0.26
	Memory Usage	Ok	16h 27m 38s	1/5	2017-01-31 09:59:01	OK - 1846 / 2026 MB (91%) Free Memory, Used: 507 MB, Shared: 0 MB, Buffers: 81 MB, Cached: 328 MB
	Swap Usage	Ok	16h 27m 13s	1/5	2017-01-31 09:59:44	SWAP OK - 100% free (4031 MB out of 4031 MB)
	Yum Updates	Warning	16h 26m 27s	5/5	2017-01-31 09:59:10	YUM WARNING: O/S requires an update.
server02	/ Disk Usage	Ok	16h 16m 39s	1/5	2017-01-31 10:00:19	DISK OK - free space: / 9691 MB (86% inode=98%):
	Load	Ok	16h 15m 39s	1/5	2017-01-31 10:01:14	OK - load average: 0.00, 0.00, 0.00
	Memory Usage	Ok	16h 14m 55s	1/5	2017-01-31 10:02:02	OK - 1777 / 2010 MB (88%) Free Memory, Used: 599 MB, Shared: 0 MB, Buffers: 85 MB, Cached: 366 MB
	Swap Usage	Ok	16h 14m 2s	1/5	2017-01-31 09:57:52	SWAP OK - 100% free (3999 MB out of 3999 MB)
	Yum Updates	Warning	16h 13m 15s	5/5	2017-01-31 09:57:21	YUM WARNING: O/S requires an update.
server03	/ Disk Usage	Ok	16h 12m 25s	1/5	2017-01-31 09:59:19	DISK OK - free space: / 11747 MB (89% inode=95%):
	Load	Ok	16h 16m 52s	1/5	2017-01-31 09:59:49	OK - load average: 0.01, 0.04, 0.05
	Memory Usage	Ok	16h 16m 28s	1/5	2017-01-31 10:00:27	OK - 1514 / 1893 MB (79%) Free Memory, Used: 650 MB, Shared: 0 MB, Buffers: 137 MB, Cached: 272 MB
	Swap Usage	Ok	16h 15m 33s	1/5	2017-01-31 10:01:21	SWAP OK - 100% free (1635 MB out of 1635 MB)
	Yum Updates	Warning	16h 14m 42s	5/5	2017-01-31 10:01:02	YUM WARNING: O/S requires an update.
server04	/ Disk Usage	Ok	16h 13m 54s	1/5	2017-01-31 09:57:59	DISK OK - free space: / 11770 MB (89% inode=95%):
	Load	Ok	16h 13m 5s	1/5	2017-01-31 09:58:48	OK - load average: 0.00, 0.01, 0.05
	Memory Usage	Ok	16h 14m 55s	1/5	2017-01-31 10:02:02	OK - 1777 / 2010 MB (88%) Free Memory, Used: 599 MB, Shared: 0 MB, Buffers: 85 MB, Cached: 366 MB
	Swap Usage	Ok	16h 15m 28s	1/5	2017-01-31 10:01:27	SWAP OK - 100% free (1635 MB out of 1635 MB)
	Yum Updates	Warning	16h 14m 42s	5/5	2017-01-31 10:01:02	YUM WARNING: O/S requires an update.
server05	/ Disk Usage	Ok	16h 15m 22s	1/5	2017-01-31 10:01:39	DISK OK - free space: / 12644 MB (89% inode=99%):
	Load	Ok	16h 14m 36s	1/5	2017-01-31 09:57:14	OK - load average: 0.00, 0.01, 0.05
	Memory Usage	Ok	16h 13m 45s	1/5	2017-01-31 09:58:08	OK - 1728 / 1840 MB (93%) Free Memory, Used: 112 MB, Shared: 8 MB, Buffers + Cached: 330 MB
	Swap Usage	Ok	16h 12m 57s	1/5	2017-01-31 09:58:52	SWAP OK - 100% free (1639 MB out of 1639 MB)
	Yum Updates	Warning	16h 16m 22s	5/5	2017-01-31 09:59:24	YUM WARNING: O/S requires an update.

Nagios XI – How To Use The Bulk Host Cloning And Import Wizard

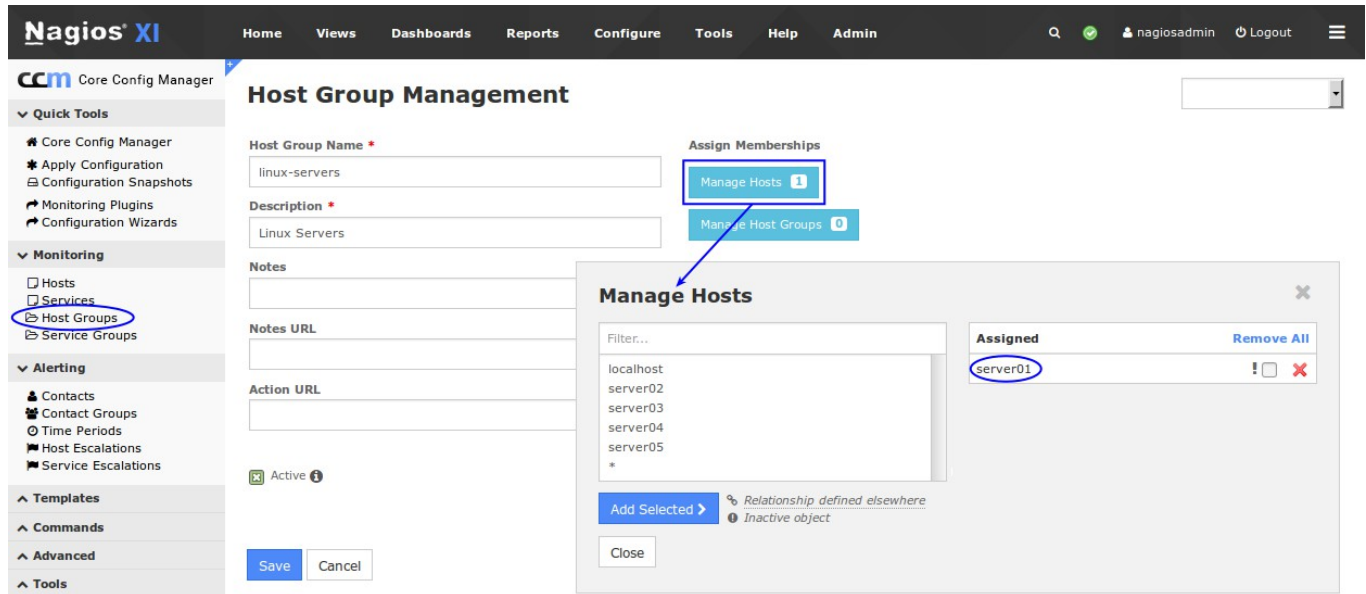
Host Group Membership

The host group membership(s) will only be inherited when they are defined on the host object.

In the screenshot below, you can see how the server01 host is a member of the **linux-servers** host group when editing the server01 host object. This membership **will** be inherited by the configuration wizard.



In the screenshot below, you can see how the server01 host is a member of the **linux-servers** host group when editing the linux-servers host group. This membership will **not** be inherited by the configuration wizard.



Limitations

The Bulk Host Import Wizard cannot clone properly some types of service checks, that rely on other applications. For example, you cannot clone a host, created by running the Network Switch/Router Wizard or Web Transaction Wizard, because they rely on MRTG and WebInject.

Possible Issues

Issue: “No template services selected” error in Step 2 of the wizard.

Solution: Selecting at least one service is required, in order to continue.

Issue: Apply Configuration fails with: “Error: Service description, host name, or check command is NULL. Error: Could not register service...”.

Solution: Make sure that your “template” (the host you are trying to clone) has the same config name for host and services. If you renamed host/services they may be different. In this case the wizard will fail with above listed error message.

Issue: Alias is not inherited, so under Host Status Detail you see: “Alias: alias”.

Solution: Alias is not inherited by default – you need to define an alias (description) in the Step 2 of the wizard.

Issue: Hostgroup relationship is not inherited.

Solution: Define hostgroup members under the “Host Management”, NOT under the “Host Group Management” in the CCM. Please refer to the Host Group Membership section for detailed information on this.

Tips

First, before you even start the Bulk Host Import Wizard, double check the host that you are about to clone. Make sure it is set up properly and run the Write Config Tool to make sure that you don't have any config errors (CCM > Tools > Config File Management).

Next, run the wizard but clone your host only a few times, just to make sure you are not going to run into some unexpected issues.

Note: Even if cloning of your host is successful, it is very difficult to undo what you've done and start “clean”, in case you forgot something (add a service, change alias, etc.), especially if you created 500+ new hosts! If you have the Nagios XI Enterprise license then you could use the Bulk Modifications Tool (CCM > Tools) to make mass changes, otherwise you may have to delete all the objects and start again.

If you are going to create a huge number of hosts, using the Bulk Host Import Wizard, you may run into some time-out issues. To avoid that, you can adjust some limits in the `/etc/php.ini` file. Open the file in a text editor:

```
vi /etc/php.ini
```

Increase the values under the “Resource Limits” section according to your needs and system specifications. You may have to modify these lines:

```
max_execution_time =  
max_input_time =  
memory_limit =
```

Also, you can add the following line on the bottom of the file:

```
max_input_vars = 100000
```

Save and close the file. Restart apache, so that the changes can take effect:

```
service httpd restart
```

Finishing Up

This completes the documentation on using the Bulk Host Cloning and Import Wizard 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>