

# Bulk Management Of Hosts And Services In Nagios XI

Ludmil Miltchev

[lmiltchev@nagios.com](mailto:lmiltchev@nagios.com)



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- ▶ Why Use Bulk Host Cloning and Import Wizard?
- ▶ Installing the Bulk Host Cloning and Import Wizard
- ▶ Running the Configuration Wizard
- ▶ Limitations of the BHCIW
- ▶ Possible issues
- ▶ Other Bulk Modification Tools in Nagios XI

# Why Use Bulk Host Cloning and Import Wizard

- ▶ Need for cloning hosts along with their services
  - ▶ The “old way”:
    - ▶ Copying hosts via CCM
      - ▶ Click on the “Copy” Action button
      - ▶ “New” host appears in the list of hosts
      - ▶ Modify, Save, and Apply Configuration
      - ▶ “New” host has NO services!
    - ▶ Copying services via CCM
      - ▶ Clicking on the “Copy” Action button
      - ▶ “New” service DON’T appear in the list of services but in the “Config name filter” drop-down menu (Service Management)
      - ▶ Modify, Save, and Apply Configuration

# Why Use Bulk Host Cloning and Import Wizard

<input type="checkbox"/> Windows7	Test Windows Server	Yes	Synced	
<input type="button" value="Add New"/> <input type="button" value="Apply Configuration"/>		With Checked: <input type="text"/> <input type="button" value="Go"/>		
<input type="checkbox"/> Windows7	Test Windows Server	Yes	Synced	
<input type="checkbox"/> Windows7 (1)	Test Windows Server	No	Sync Missed	

## Service Status

Host: **Windows7-NEW**

Showing 0-0 of 0 total records

Host ↓	Service ↑	Status ↑	Duration ↑	Attempt ↑	Last Check ↑	Status Inform
No matching services found						
		Page 0	of 0	15 Per Page	<input type="button" value="Go"/>	


























# Why Use Bulk Host Cloning and Import Wizard

## Nagios Core Config Manager

### Service Management

Check All Search:   

Config name filter:

Config Name	Service Name	Active	Sync Status	Actions
<input type="checkbox"/> Windows7	CPU Usage	Yes	Synced	    
<input type="checkbox"/> Windows7	Drive C: Disk Usage	Yes	Synced	    
<input type="checkbox"/> Windows7	Memory Usage	Yes	Synced	    
<input type="checkbox"/> Windows7	Ping	Yes	Synced	    
<input type="checkbox"/> Windows7	Uptime	Yes	Synced	    

With Checked:

## Nagios Core Config Manager

### Service Management

Check All Search:   

Config name filter:

Config Name	Service Name	Active	Sync Status	Actions
<input type="checkbox"/> Windows7 (1)	CPU Usage	No	Sync Missed	    

With Checked:

# Why Use Bulk Host Cloning and Import Wizard

## Nagios Core Config Manager

### Service Management

Common Settings | Check Settings | Alert Settings | Misc Settings

**Common Settings**

Config Name\*  ?

Hosts\*   
  
  
 ?

+  null  standard ?

Service description\*  ?

Display name  ?

Active

Host groups\*   
  
  
 ?

+  null  standard ?

Service groups  ?

+  null  standard ?

# Why Use Bulk Host Cloning and Import Wizard

## Nagios Core Config Manager

### Service Management

Common Settings | Check Settings | Alert Settings | Misc Settings

**Common Settings**

Config Name\*  ?

Hosts\*   
  
  
 ?

+  null  standard ?

Service description\*  ?

Display name  ?

Active

Host groups\*   
  
  
 ?

+  null  standard ?

Service groups  ?

+  null  standard ?

# Why Use Bulk Host Cloning and Import Wizard

## Nagios Core Config Manager

### Service Management



Check All Search:   

Config name filter:

Config Name	Service Name	Active	Sync Status	Actions
<input type="checkbox"/> Windows7-NEW	CPU Usage	Yes	Sync Missed	    

With Checked:

Data successfully inserted into the database!

Host	Service	Status	Duration	Attempt	Last Check	Status Information
Windows7-NEW 	CPU Usage 	Pending	N/A	1/5	N/A	Service check is pending... Check is scheduled for 2012-09-16 15:22:59

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Last Updated: 2012-09-16 15:22:01



# Why Use Bulk Host Cloning and Import Wizard

- ▶ Useful For Mid-size And Large Environments
- ▶ Useful When There Are Many Similar Hosts
- ▶ You Can Add More Services Later
- ▶ Time Saver
- ▶ Easy to Use

# Installing the Bulk Host Cloning and Import Wizard

- ▶ Downloading -> from the Nagios Exchange:  
<http://exchange.nagios.org/directory/Addons/Configuration/Configuration-Wizards/Bulk-Host-Import-Wizard/details>
- ▶ Installing -> as any other wizard:  
Admin->Manage Config Wizards->Browse->...->Upload Wizard
- ▶ Documentation -> [Installing Configuration Wizards](#)

# Running the Bulk Host Cloning and Import Wizard

## ▶ Step 1

- ▶ Click on “Configure” -> “Run the Monitoring Wizard”
- ▶ Click on “Bulk Host Cloning and Import”



### Bulk Host Cloning and Import

Clones existing hosts quickly and easily. Supports import from auto-discovery jobs and CSV input.

## ▶ Step 2

- ▶ Select an existing host that should be cloned and used as a template

### Bulk Host Cloning and Import Monitoring Wizard - Step 2



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.

#### Template Host Information

Host Name:

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

# Running the Bulk Host Cloning and Import Wizard

## ▶ Step 3

- ▶ Select the services that should be cloned
- ▶ Enter the addresses of new hosts that should be created

Fields:

- ▶ Address
- ▶ Name
- ▶ Description

### Bulk Host Cloning and Import Monitoring Wizard - Step 3



#### Template Host



#### Template Services

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

- Ping
- Yum Updates
- Load
- CPU Stats
- Memory Usage
- Swap Usage
- Open Files
- Users
- Total Processes
- / Disk Usage
- SSH Server
- Cron Scheduling Daemon

#### Import / Cloning Data

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

	Field 1	Field 2	Field 3
Fields:	<input type="text" value="Address"/>	<input type="text" value="Name"/>	<input type="text" value="Description"/>

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

Data:

```
192.168.0.100,LS-100,Linux Server 100
192.168.0.101,LS-101,Linux Server 101
192.168.0.102,LS-102,Linux Server 102
192.168.0.103,LS-103,Linux Server 103
192.168.0.104,LS-104,Linux Server 104
192.168.0.105,LS-105,Linux Server 105
```

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.

# Running the Bulk Host Cloning and Import Wizard

- ▶ Step 4
  - ▶ Inheriting Monitoring Options

## Bulk Host Cloning and Import Monitoring Wizard - Step 4



### Monitoring Settings

---

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

Back

Next

Finish

# Running the Bulk Host Cloning and Import Wizard

- ▶ Step 5
  - ▶ Inheriting Notification Options

## Bulk Host Cloning and Import Monitoring Wizard - Step 5



### Notification Settings

---

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

Back

Next

Finish

# Running the Bulk Host Cloning and Import Wizard

- ▶ Step 6
  - ▶ Inheriting Parent/Child Relationships

## Bulk Host Cloning and Import Monitoring Wizard - Step 6



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

Back

Next

Finish

# Running the Bulk Host Cloning and Import Wizard

- ▶ Final Step
  - ▶ Adding the New Configuration

## Bulk Host Cloning and Import Monitoring Wizard - Final Step



### Final Settings

---

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

Back

Apply



# Running the Bulk Host Cloning and Import Wizard

## ▶ Newly Added Hosts

LS-100		Pending	N/A	1/5	N/A	Host check is pending... Check is scheduled for 09/06/2012 11:49:19
LS-101		Pending	N/A	1/5	N/A	Host check is pending... Check is scheduled for 09/06/2012 11:49:36
LS-102		Pending	N/A	1/5	N/A	Host check is pending... Check is scheduled for 09/06/2012 11:49:54
LS-103		Pending	N/A	1/5	N/A	Host check is pending... Check is scheduled for 09/06/2012 11:50:11
LS-104		Pending	N/A	1/5	N/A	Host check is pending... Check is scheduled for 09/06/2012 11:50:29
LS-105		Pending	N/A	1/5	N/A	Host check is pending... Check is scheduled for 09/06/2012 11:50:47

Host	Service	Status	Duration	Attempt	Last Check	Status Information
LS-101	/ Disk Usage	Pending	N/A	1/5	N/A	Service check is pending... Check is scheduled for 09/06/2012 11:53:14
	CPU Stats	Pending	N/A	1/5	N/A	Service check is pending... Check is scheduled for 09/06/2012 11:53:47
	Cron Scheduling Daemon	Pending	N/A	1/5	N/A	Service check is pending... Check is scheduled for 09/06/2012 11:54:21
	Load	Ok	2m 18s	1/5	09/06/2012 11:49:56	OK - load average: 0.63, 0.60, 0.56
	Memory Usage	Ok	1m 45s	1/5	09/06/2012 11:50:29	OK - 6065 / 16031 MB (37%) Free Memory, Used: 9966 MB, Shared: 0 MB, Buffers: 368 MB, Cached: 8058 MB
	Open Files	Ok	1m 11s	1/5	09/06/2012 11:51:03	OK: 6400 open files (0% of max 1620129)
	Ping	Ok	38s	1/5	09/06/2012 11:51:36	OK - 192.168.0.101: rta 0.176ms, lost 0%
	SSH Server	Pending	N/A	1/5	N/A	Service check is pending... Check is scheduled for 09/06/2012 11:52:09
	Swap Usage	Pending	N/A	1/5	N/A	Service check is pending... Check is scheduled for 09/06/2012 11:52:43
	Total Processes	Pending	N/A	1/5	N/A	Service check is pending... Check is scheduled for 09/06/2012 11:53:16
	Users	Pending	N/A	1/5	N/A	Service check is pending... Check is scheduled for 09/06/2012 11:53:49
	Yum Updates	Pending	N/A	1/5	N/A	Service check is pending... Check is scheduled for 09/06/2012 11:54:23

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# Running the Bulk Host Cloning and Import Wizard

## ▶ The “template” Host: Configuration

```
define host {
    host_name          CentOS 5.5 x64
    use                xiwizard_linuxserver_host
    alias              Linux Server
    address            192.168.0.83
    parents            localhost
    hostgroups         linux-servers
    max_check_attempts 5
    check_interval     5
    retry_interval     1
    check_period       xi_timeperiod_24x7
    contacts           nagiosadmin
    notification_interval 60
    notification_period nagiosadmin_notification_times
    first_notification_delay 0
    notification_options d,u,r
    notifications_enabled 1
    icon_image         centos.png
    statusmap_image    centos.png
    _xiwizard          linux-server
    register           1
}
```

# Running the Bulk Host Cloning and Import Wizard

## ▶ The “new” Host: Configuration

```
define host {
    host_name          LS-101
    use                xiwizard_linuxserver_host
    alias              Linux Server 101
    address            192.168.0.101
    parents            localhost
    hostgroups         linux-servers
    max_check_attempts 5
    check_interval     5
    retry_interval     1
    check_period       xi_timeperiod_24x7
    contacts           nagiosadmin
    notification_interval 60
    notification_period nagiosadmin_notification_times
    first_notification_delay 0
    notification_options d,u,r
    notifications_enabled 1
    icon_image         centos.png
    statusmap_image     centos.png
    _xiwizard          linux-server
    register            1
}
```

# Limitations of the BHCIW

- ▶ It can't clone properly some types of service checks, that rely on other applications, for example:
  - ▶ Web Transaction Wizard
  - ▶ Network Switch / Router Wizard
- ▶ It copies over the same password (from the original template) to all new services on a windows host
- ▶ If you made a mistake it would be difficult to “undo” your actions and “start clean” on a version earlier than Nagios XI 2012

# Possible Issues

- ▶ **Issue:** *“No template services selected”* error in Step 3
- ▶ **Solution:** Select at least one service
  
- ▶ **Issue:** Apply Configuration Fails:  
*“Error: Service description, host name, or check command is NULL  
Error: Could not register service...”*
- ▶ **Solution:** Use the same config name for the host and the services

# Possible Issues

- ▶ **Issue:** Alias is not inherited: “*Alias: alias*”
- ▶ **Solution:** Define an alias in Step 3
  
- ▶ **Issue:** Hostgroup relationship is not inherited
- ▶ **Solution:** Define hostgroup members under the “Host Management” NOT under the “Host Group Management” in CCM

# Other Bulk Modification Tools in Nagios XI

## ▶ Nagios XI CCM – Bulk Modification Tool

### ▶ Change A Single Config Option:

- ▶ max\_check\_attempts, check\_interval, retry\_interval, freshness\_threshold, low\_flap\_threshold, high\_flap\_threshold, notification\_interval, notification\_period, first\_notification\_delay, active\_checks\_enabled, passive\_checks\_enabled, check\_freshness, event\_handler\_enabled, flap\_detection\_enabled, retain\_status\_information, retain\_nonstatus\_information, process\_perfdata, notifications\_enabled

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- ▶ **Mail:** Nagios Enterprises, LLC  
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**Thank you!**

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