

How To Add Services To Preexisting Switch Or Router In Nagios XI

Purpose

This document describes how to sidestep this limitation and dynamically add ports to a switch or an interface to a router. When a switch or router is already being monitored by Nagios XI, but you need to add an additional service, the limitations of MRTG's functionality keeps that service from being monitored.

Note: As of XI 2014 these steps are no longer necessary to add new services to an existing switch or router, as MRTG now stores configurations in per-device .cfg files. The XI Switch / Router Wizard handles all of the logic for you.

Terminal Session

The steps in this documentation require you to establish a terminal session to your Nagios XI server as the root user.

Initial Checklist

Nagios XI uses MRTG to monitor switches and routers in a flexible and powerful way. In order to add or remove items from Nagios XI's monitoring schema, here is a checklist of what you will have to do:

- Remove the `mrtgscan` scan file from the `/usr/local/nagiosxi/tmp` folder
- Remove all traces of the previous switch configuration from the `/etc/mrtg/mrtg.conf`
- Verify syntax of the `mrtg.cfg` file
- Rerun the Switch/Router Monitoring Wizard

Cleaning Out /usr/local/nagiosxi/tmp

Nagios XI caches the `mrtgscan`'s it performs to populate the port configuration in the Switch/Router Wizard web interface. You will have to remove these `mrtgscan` files as Nagios XI may use these to populate the web interface with stale or outdated data. Neither Nagios XI nor MRTG depend on these files for anything more than initial configuration, so deleting these will not affect future behavior of already setup hosts and services.

Execute the following command:

```
rm /usr/local/nagiosxi/tmp/mrtgscan* -f
```

This deletes every single file in the `/usr/local/nagiosxi/tmp/` directory that starts with `mrtgscan`.

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Remove Previous MRTG Configuration

First create a backup copy of your configuration file with this command:

```
cp /etc/mrtg/mrtg.cfg /etc/mrtg/mrtg.cfg.bkp
```

MRTG will attempt to add a service to its configuration using the `cfgmaker` command, however, if it runs into any previous configuration for the same host, it will not add the new configuration for that host and will simply not add anything new for that host. What you must do is go through your `/etc/mrtg/mrtg.cfg` and remove any lines referring to the previous configuration for the host. Here is a sample snippet from an example configuration. In the following example we see some configuration for `192.168.5.41`, a switch that we wish to add more services to.

```
### Interface 1 >> Descr: 'Port:-1-Gigabit---Level' | Name: '' | Ip: '' |
Eth: '' ###
Target[192.168.5.41_1]: 1:nagiosprivate@192.168.5.41:::::1
SetEnv[192.168.5.41_1]: MRTG_INT_IP="" MRTG_INT_DESCR="Port:-1-Gigabit---
Level"
MaxBytes[192.168.5.41_1]: 125000000
Title[192.168.5.41_1]: Traffic Analysis for 1 -- PROCURVE J9450A
PageTop[192.168.5.41_1]: <h1>Traffic Analysis for 1 -- PROCURVE J9450A</h1>
    <div id="sysdetails">
        <table>
            <tr>
                <td>System:</td>
                <td>PROCURVE J9450A in </td>
            </tr>
        </table>
    </div>
### Interface 2 >> Descr: 'Port:-2-Gigabit---Level' | Name: '' | Ip: '' |
Eth: '' ###
Target[192.168.5.41_2]: 2:nagiosprivate@192.168.5.41:::::1
SetEnv[192.168.5.41_2]: MRTG_INT_IP="" MRTG_INT_DESCR="Port:-2-Gigabit---
Level"
MaxBytes[192.168.5.41_2]: 125000000
Title[192.168.5.41_2]: Traffic Analysis for 2 -- PROCURVE J9450A
PageTop[192.168.5.41_2]: <h1>Traffic Analysis for 2 -- PROCURVE J9450A</h1>
    <div id="sysdetails">
        <table>
```

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```
<tr>
  <td>System:</td>
  <td>PROCURVE J9450A in </td>
</tr>
</table>
</div>
```

You will have to find and delete all of these entries for this particular host. To ensure that you are deleting the correct items, make sure the name between the square brackets is correct. For example:

```
Target[192.168.5.41_2]
```

Is describing host 192.168.5.41, Port 2. Once you have found and deleted all entries, you are done with editing the `mrtg.cfg`.

Verify MRTG Syntax

After editing the `mrtg.cfg` file you need to execute the following command to verify the configuration file is valid:

```
LANG=C LC_ALL=C /usr/bin/mrtg /etc/mrtg/mrtg.cfg -check
```

If it does not produce any output the configuration is valid. However, if it returns some sort of error, restore your backup that you made and make try to remove the old host configurations again.

Run the Switch/Router Monitoring Wizard

With Nagios XI, you can add services to an already configured host with no hassle at all, you simply run the Switch/Router wizard and select the new ports to monitor. However, if you want to modify a service that is already configured on a host, you will need to use the **Core Config Manager** to delete the service before rerunning the configuration wizard. If you are simply adding a new service, you need not worry about deleting anything before running the Switch/Router Wizard.

Finishing Up

This completes the documentation on how to dynamically add ports to a switch or an interface to a router. 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](#)

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