

The Industry Standard in IT Infrastructure Monitoring

Purpose

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. This document describes how to side step this limitation and dynamically add ports to a switch or an interface to a router.

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.

Target Audience

This document is intended for use by Nagios XI Administrators who have dynamic environments and must adjust their switch infrastructure and monitoring configurations to reflect those changes.

Initial Checklist

Nagios XI leverages the power of 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:

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

Cleaning Out nagiosxi/tmp

This particular item on the agenda is very simple. Nagios XI caches the mrtgscan's it performs to populate the port configuration in the Switch/Router Wizard web interface. We will have to remove these mrtgscan files as Nagios XI may use these to populate the web interface with stale or outdated data.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.

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

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

Remove Previous MRTG Configuration

Just to be safe make a backup:

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

MRTG will attempt to add a service to its configuration using 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 we must do is go through our /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 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>
            <tr>
                <td>System:</td>
                <td>PROCURVE J9450A in </td>
            </tr>
        </table>
    </div>
```

We'll 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

Now, since we edited the mrtg.cfg by hand, let us quickly make sure everything went smoothly.

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

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

A Note About Nagios XI Configurations

With Nagios XI, you can add services to an already configured host with no hassle at all. 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. However, if you are simply adding a new service, you need not worry about deleting anything before running the Switch/Router Wizard.