How To Use the Nagios XI BPI Addon for Nagios Core

Purpose

This document describes how to use the Nagios XI BPI Addon for Nagios Core.

IMPORTANT: Nagios XI comes with Nagios BPI by default! Do NOT try to install or upgrade the component using the steps outlined below. This will break your component! Please refer to the following documentation for Nagios XI:

Using BPI In Nagios XI

Downloading And Installing Nagios BPI for Nagios Core

The following steps have been tested on Nagios Core 4.3.4 running on CentOS 7 using the following installation guide:

Installing Nagios Core From Source

Establish a terminal session to your Nagios XI server as root and execute the following commands:

```
cd /tmp
wget https://github.com/NagiosEnterprises/nagiosbpi/archive/master.tar.gz
tar xzf master.tar.gz
```

Move the entire `nagiosbpi` folder to the location that is accessible by your webserver:

```
mv /tmp/nagiosbpi-master/nagiosbpi /var/www/html/
```

Set the permissions:

```
cd /var/www/html/nagiosbpi
mkdir tmp
chmod +x set_bpi_perms.sh
./set_bpi_perms.sh
chown -R apache:nagios /var/www/html/nagiosbpi/
```

Edit the contents of the `constants.conf` file to match your directory locations. Use absolute directory locations, for example:

```
STATUSFILE=/usr/local/nagios/var/status.dat
OBJECTSFILE=/usr/local/nagios/var/objects.cache
CONFIGFILE=/var/www/html/nagiosbpi/bpi.conf
CONFIGBACKUP=/var/www/html/nagiosbpi/bpi.conf.backup
```


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```
XMLOUTPUT=/var/www/html/nagiosbpi/tmp/bpi.xml
```

You will now be able to access Nagios BPI from your web browser using the following URL:

```
http://<yourserver>/nagiosbpi
```

An example config will be shown. From here you can start creating new BPI groups using the built-in configuration tools.

Understanding the BPI Group Logic

The Nagios BPI groups can be a flexible tool for determining a "real" network state for a group of services.

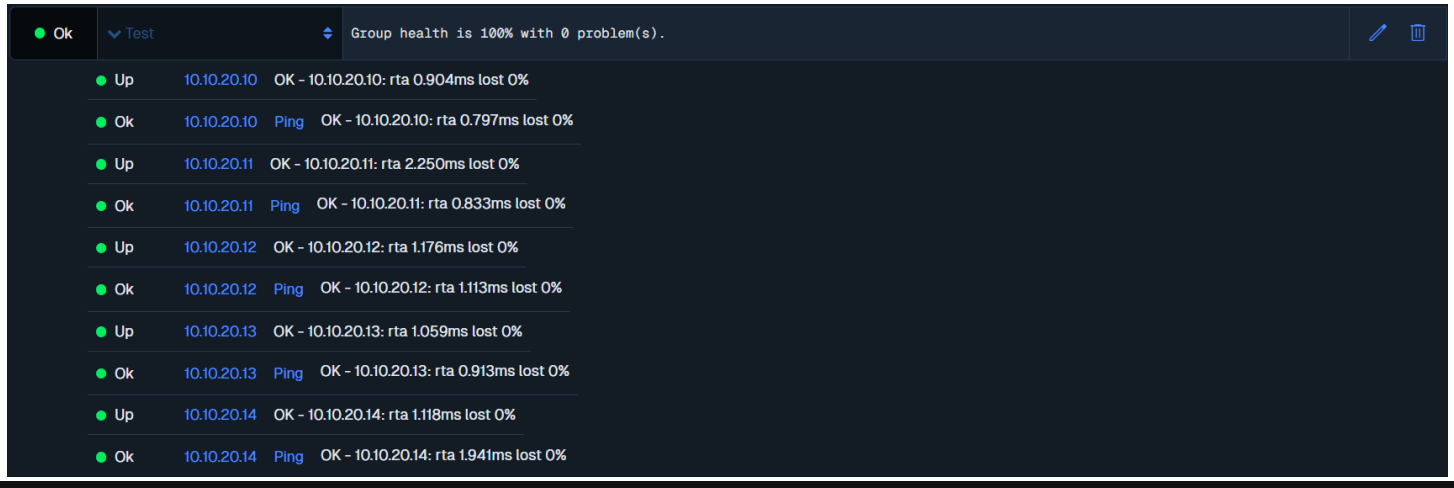
Dependencies are highly customizable and the logic for determining a group state can be defined by the user.

Factors that create a 'Warning' or 'Critical' state

- **All** non-essential members are in a problem state
- **Any** "Essential members" are in a problem state
- The group's problem count exceeds the **Warning Threshold**
- The group's problem count exceeds the **Critical Threshold**

A Basic BPI Group

This is a test group with 5 hosts. The group has no thresholds set, and there are no essential members. Since there are still some members in an 'Ok' state, the group state is listed as 'Ok.'



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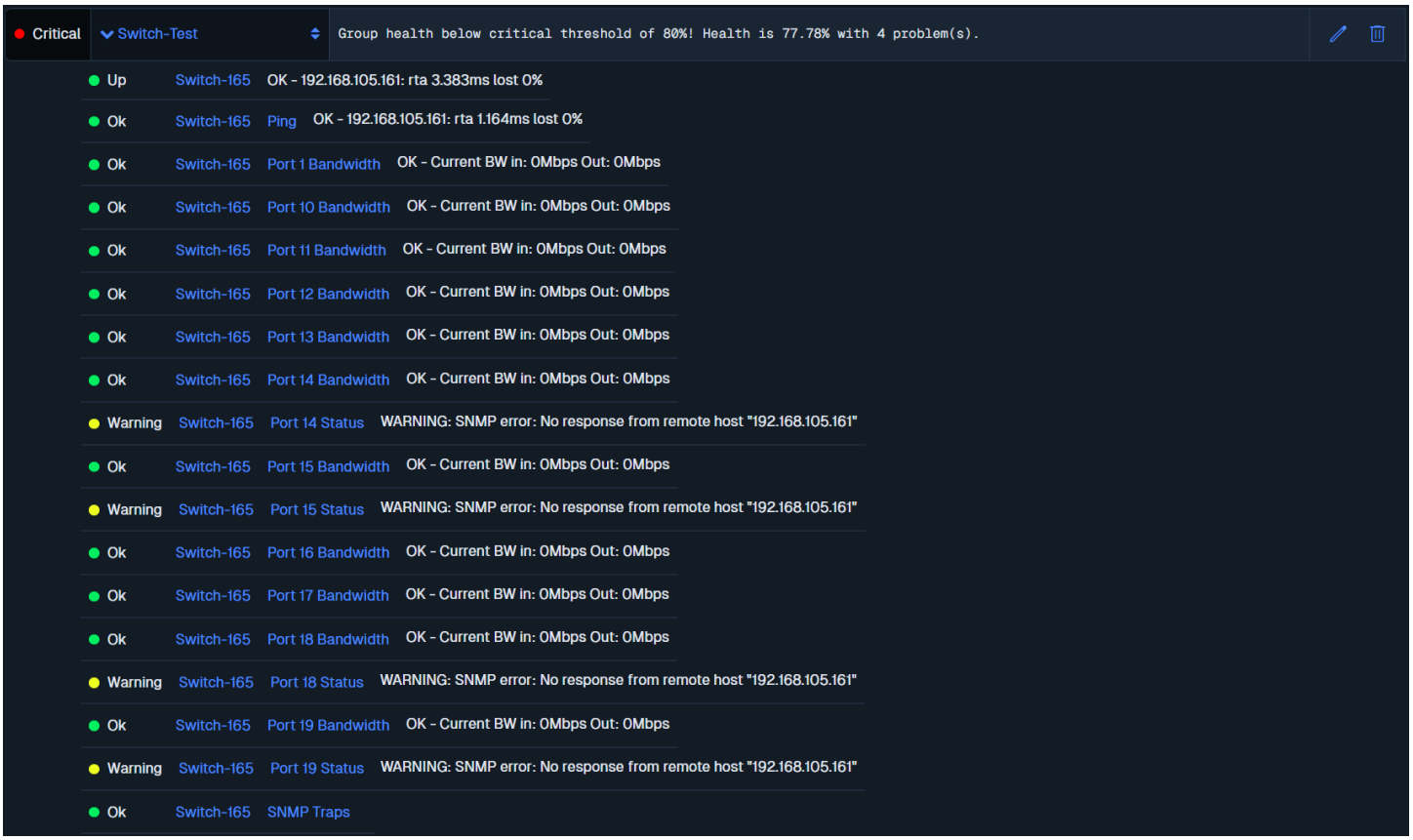
A Group Using Thresholds

This next group has no essential members, but it has a warning threshold set at 2 problems, and a critical threshold set at 4 problems. Since the problem count of the group's members exceeds the critical threshold, the group state is 'Critical.'



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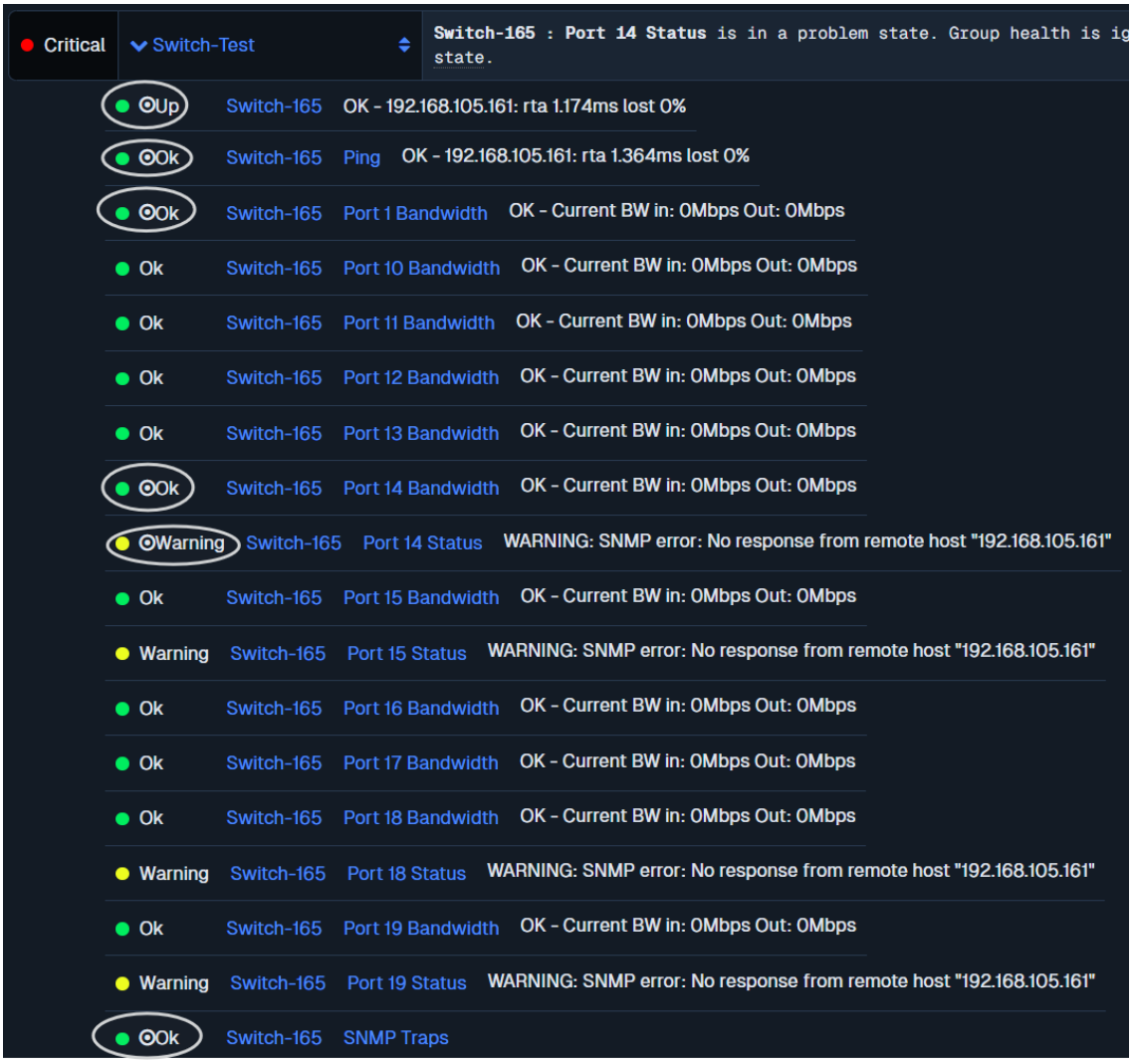
A Group Using Essential Members

This group has 2 essential members defined, which are denoted with a ⊙ next to their state. If an essential member has a problem, the entire group will be in a problem state, even though the thresholds have not been exceeded, and there is only one problem.



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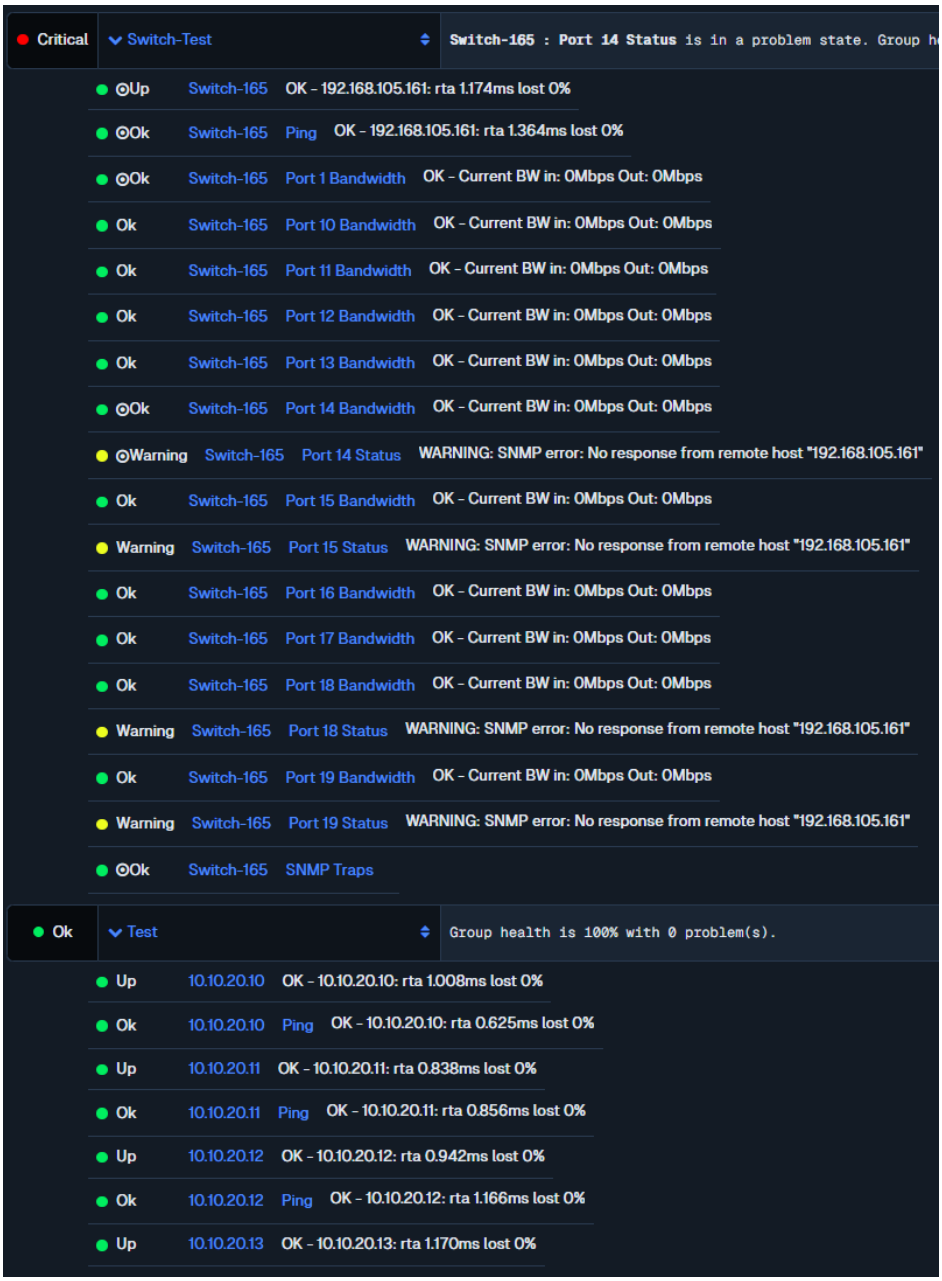
Complex BPI Groups

The BPI groups determine state by looking down only one level. The BPI group will essentially look for the worst state trigger in the group, so if the warning threshold is exceeded for a group, but an essential member is "critical", the group will still be “critical". There is no limit to the number of sub-groups that can be created, you can define as many levels in your dependency tree as you want.



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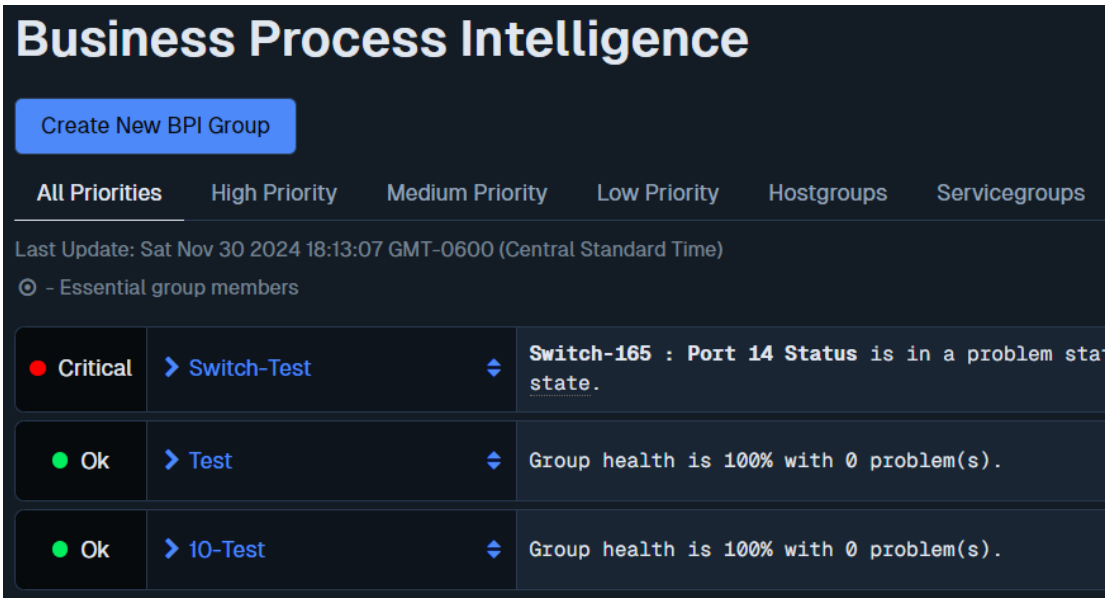
Primary Groups

"Primary" BPI groups are seen from the top level of BPI page, while a non-primary group must have a visible parent group in order to be seen on the display. If a non-primary group is defined but never assigned as a member somewhere else, it will not be visible on the display.



Finishing Up

This completes the documentation on How To Use the Nagios XI BPI Addon for Nagios Core. 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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