Nagios®

The Industry Standard in IT Infrastructure Monitoring

Purpose

This document describes different methods for configuring a distributed monitoring solution with Nagios.

Target Audience

This document is intended for use by Nagios Administrators.

Additional Documents

Nagios administrators should read the following documents to better understand the concepts and options available for distributed monitoring:

- *Using DNX*
- *Integrating MNTOS With Nagios*
- *Integrating Mod-Gearman With Nagios XI*

These documents, along with other guides and tutorials, can be found on the Nagios Library at http://library.nagios.com
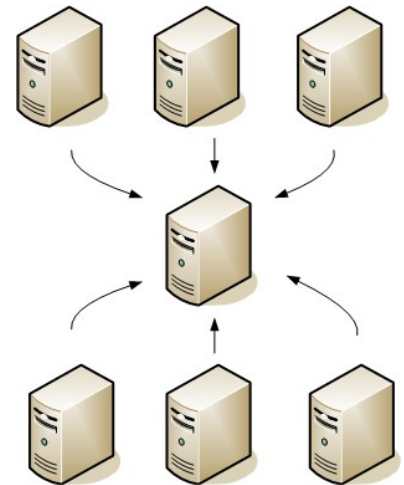
Distributed Monitoring Overview

The goal of distributed monitoring is to allow your Nagios environment to monitor a large infrastructure.

Methods of achieving an distributed monitoring solution can sometimes be complicated. Before you embark on designing and deploying an distributed monitoring solution you should outline the goals you wish to achieve with the solution you are proposing.

This document describes different options for setting up a distributed monitoring environment, along with their strengths and weaknesses. No single solution is the "right" solution for every environment. The method you choose to implement should be based on your end-goals, as well as the time and effort required to deploy and maintain the chosen solution.

The following distributed monitoring solutions are covered in this document:

- **DNX**
- **Nagios Fusion**
- **MNTOS**

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DNX

DNX ("Distributed Nagios eXecutor") is a popular load-balancing addon that works with both Nagios Core and Nagios XI. It is suitable for admins with relatively large installations who need to reduce the load on their monitoring server by offloading checks to other machines.

DNX approaches the problem of scalability and complexity of distributed Nagios setups with a master/slave configuration, where one Nagios server hands out jobs to worker nodes. These worker nodes have the Nagios plugins installed, but do not have any configuration of their own, and no checks actually "assigned" to them. This relieves the administrator of the problem of having to maintain configurations on multiple machines and losing service checks if a worker node goes down.

With DNX, the master server contains all of the configuration and check definitions. Each time a check needs to be executed, the master server passes it off to one of the worker nodes to complete, and the worker node then reports back with the results. Worker nodes can be added or removed at will, as the master keeps track of which ones are telling it they are available, and adjusts its assignments accordingly.
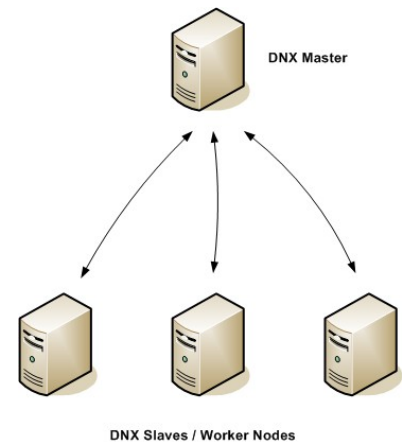
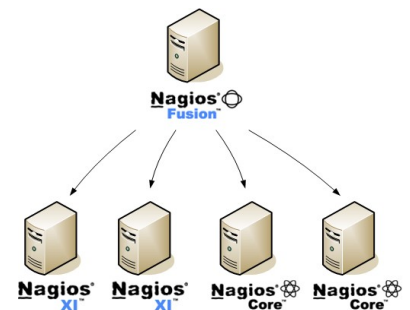| DNX Highlights |
| --- |
| • Expand your monitoring setup by adding more worker nodes
 • Configuration is handled on the central (master) server
 • Performance graphing and other I/O intensive tasks are handled on the central server, which may limit scalability |

More information on using DNX with Nagios can be found in the following document:

- *Using DNX*

Nagios Fusion

Nagios Fusion is a commercial distributed monitoring solution that provides a central dashboard to multiple Nagios Core or Nagios XI servers.

Fusion allows you to scale your monitoring environment by deploying additional Nagios XI or Nagios Core servers to monitor additional hosts, services, and applications. Each XI or Core server monitors a portion of the entire infrastructure, and Fusion provides a central dashboard that allows you to quickly see the status of everything from a single page.

Nagios Fusion Highlights
• Expand your monitoring setup by adding more monitoring servers   • Multiple users can be setup to access the Fusion interface   • Users can customize their views and dashboards   • Automatic authentication to distributed Nagios XI servers   • Central dashboard provides overall picture of environment   • Configuration is handled on the distributed (child) servers   • Performance graphing and other I/O intensive tasks are handled by the distributed servers

More information on Nagios Fusion and its capabilities can be found at:

http://www.nagios.com/products/nagiosfusion

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MNTOS

MNTOS ("Multi-Nagios Tactical Overview System") is monitoring server aggregation tool that works with both Nagios Core and Nagios XI. MNTOS provides a central dashboard that displays a tactical overview of the status of one or more monitoring servers.

MNTOS allows you to scale your monitoring environment by deploying additional Nagios servers to monitor additional hosts, services, and applications. Each Nagios server monitors a portion of the entire infrastructure, and MNTOS provides a central dashboard that allows you to quickly see the status of everything from a single page.

MNTOS Highlights
• Expand your monitoring setup by adding more monitoring servers • Central dashboard provides overall picture of environment • Configuration is handled on the distributed (child) servers • Performance graphing and other I/O intensive tasks are handled by the distributed servers
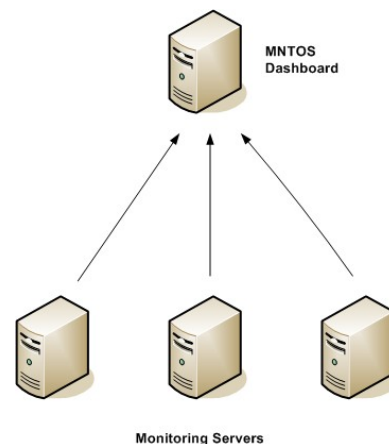
More information on using MNTOS with Nagios can be found in the following document:

- *Integrating MNTOS With Nagios*

Other Solutions

Other contributed solutions for facilitating a distributed monitoring setup can be found in the "Distributed Monitoring" category of the Nagios Exchange site at:

http://exchange.nagios.org/directory/Addons/Distributed-Monitoring

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