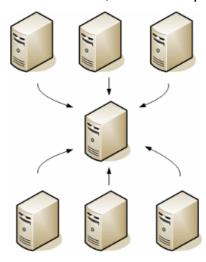
### **Purpose**

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

### **Distributed Monitoring Overview**

The goal of distributed monitoring is to allow your Nagios environment to monitor a large infrastructure, or one composed of many remote sites and network segments.



Methods of achieving a distributed monitoring solution can sometimes be complicated. Before you embark on designing and deploying a 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:

- Nagios Fusion
- Federated Monitoring
- Nagios Mod-Gearman

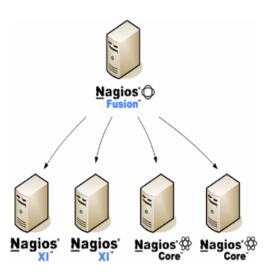
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### **Nagios Fusion**

Nagios Fusion is a commercial distributed monitoring solution that provides a centralized tactical display of status data from multiple Nagios Core or Nagios XI servers, and quick access to their web Uls.

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

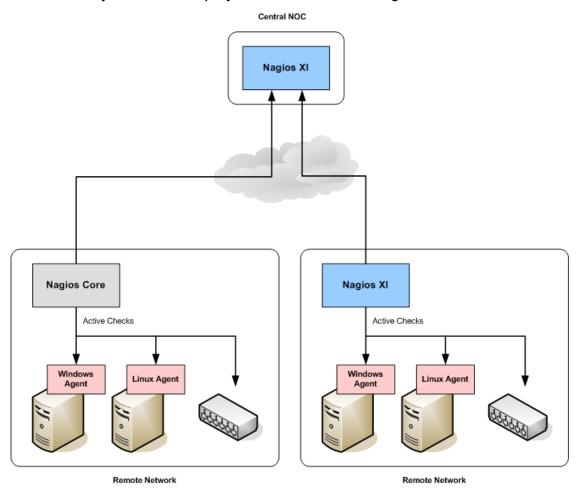
More information on Nagios Fusion and its capabilities can be found at:

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

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## **Federated Monitoring**

Large organizations with multiple networks across large geographic areas, <u>MSPs</u> with clients that have large remote networks, or users that require complex or in-depth monitoring of remote network elements may choose to deploy a federated monitoring architecture.



In this model, remote networks and their elements are monitored by dedicated Nagios servers. Each remote Nagios server may be managed by central NOC staff or by the client. Notifications, reports, and configuration is generally handled by each remote Nagios server.

Remote Nagios servers can be configured to transfer check results (status information) back to a central Nagios XI server at the NOC. This allows NOC staff to have a birds-eye view of the entire network, and provides them with centralized reporting and optional notifications.

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#### **Federated Monitoring Highlights**

- Distributed management, notifications, and reporting
- Clients can be given administrative access to the Nagios server on their network
- Onsite monitoring servers allow for more powerful, in-depth monitoring capabilities than other models
- Central monitoring server can be configured with different notification settings relevant to NOC staff

Configuring Outbound Checks with Nagios XI
Configuring Inbound Checks with Nagios XI

### **Nagios Mod-Gearman**

Nagios Mod-Gearman (NMG) is a Nagios Event Broker (NEB) module that can be used for a variety of purposes including load reduction, load balancing, and distributed monitoring.

Remote Linux servers running the Worker module are assigned checks for specific hostgroups and servicegroups, which they execute locally, then forward the results upstream to the Nagios server. Both worker check-ins with the queue on the Server module to see what checks they should run, and the forwarding of check results, are inbound to the Nagios server from the workers. Thus, inbound network access to the worker server from the Nagios server is not required for NMG itself to function.

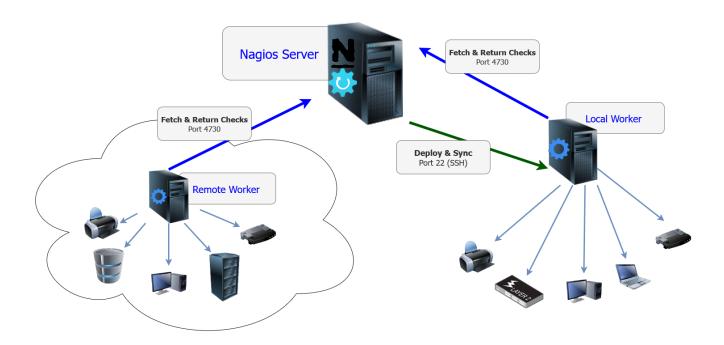
In Nagios XI 2024R2.1+, the Server module is automatically loaded on your Nagios XI server as a Premium feature. The Server module can be managed in the UI in the **Configure > Remote Workers** menu, where you can also create, deploy, and sync workers. Note that the deploy and sync capability requires inbound network access to the worker servers from Nagios XI. In cases where that is not possible or desirable, workers can be installed manually, and Server module settings can still be managed from the XI UI.

Managing Nagios Mod-Gearman in the Nagios XI UI

Integrating Nagios Mod-Gearman with Nagios XI (manual method)

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#### **Nagios Mod-Gearman Highlights**

- Local check execution, centralized alerting, reporting, and visibility
- Nagios Server load reduction and load balancing
- Add additional workers to maximize checks or handle new network segments
- Inbound network access to remote sites not required to function
- Open source and pre-loaded in XI 2024R2.1+, works with Core 4.5+ and XI 2024R1.2+
- Can be managed in XI UI in XI 2024R2.1+

## **Finishing Up**

This completes the documentation on Distributed Monitoring Solutions. 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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