

## The Industry Standard in IT Infrastructure Monitoring

### Purpose

Nagios administrators often need to ensure that their primary monitoring server is operating properly and can reach the Internet to send alert notifications via email and other methods. This document describes how to effectively monitor a primary Nagios XI server from an offsite location to ensure it is both reachable and operating properly.

### Target Audience

This document is intended for use by Nagios XI Administrators.

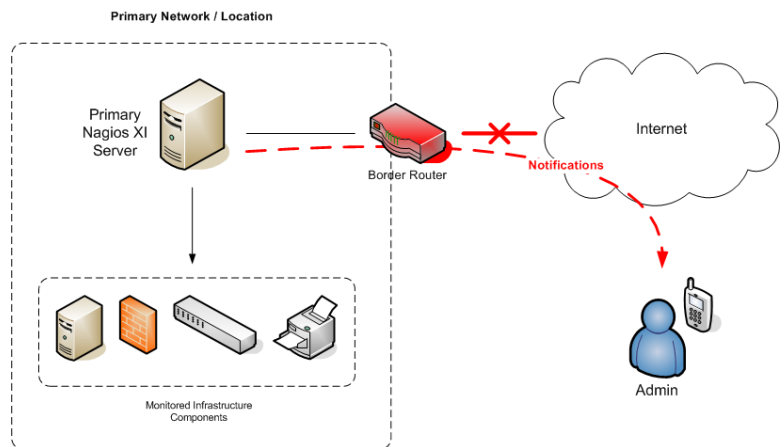
### The Problem

A problem that can directly impact the flow of notifications, and thus the an admin's awareness of infrastructure outages is the failure of a border router, or intermediary network hop between the Nagios XI server and the systems that are the "last hop" in delivery of notifications.

For example, if your border router or Internet connection goes down, Nagios XI will be unable to deliver email alerts to admins.

A problem can also occur if the primary Nagios XI server crashes, loses power, and is disconnected from the network.

To address these potential problems, an additional monitoring server can be setup to help ensure notifications of important outages.

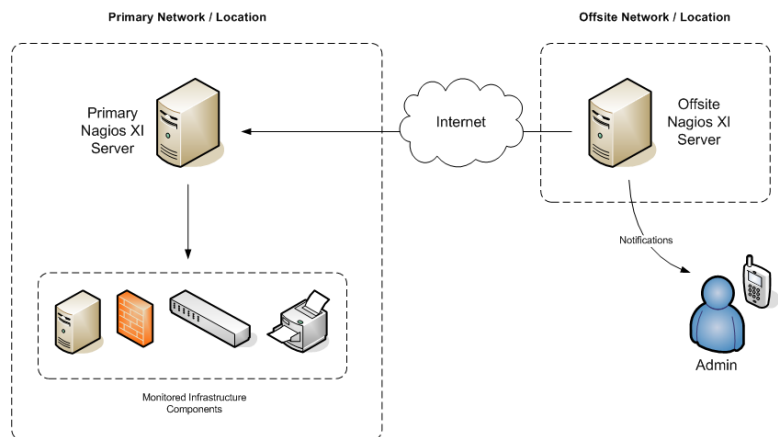


### General Architecture

A simple and effective method of ensuring that a) your primary Nagios XI monitoring server is running properly and b) that you are notified immediately if your primary Nagios XI server stops running, crashes, or becomes unreachable is to monitor that server with a remote Nagios XI instance.

With this type of monitoring architecture, a second Nagios XI instance is installed at an offsite location or separate network. This offsite location can be a home office or a data center in a separate geographic location.

The offsite Nagios XI instance is configured to monitor the primary Nagios XI server. If the offsite server detects a problem with the primary server (e.g. Nagios XI stops, or the server crashes or is disconnected from the network), the offsite server can send an alert to one or more administrators. This allows an admin to immediately begin investigating the problem and get the primary Nagios XI server back online.



## What The Offsite Server Monitors

The offsite Nagios XI instance is configured to monitor the primary Nagios XI server. The purpose of the offset server is to focus on monitoring the primary server, so it is not configured to monitor all the individual infrastructure components that the primary server monitors. This type of setup provides a simple design that minimizes administrative overhead, while accomplishing what it was designed for.

## Licensing For Your Offsite Server

Setting up an offsite Nagios XI instance to monitor your primary Nagios XI server does not usually require you to obtain a separate license. Nagios XI is licensed for free usage if you monitor seven (7) nodes or less. This allows you to setup an offsite Nagios XI instance to monitor you primary instance without having to purchase an additional license.

## Server Monitoring Wizard

We have developed a special configuration wizard to simplify the process of monitoring a remote Nagios XI server. You will need to install this wizard on your offsite Nagios XI server. This wizard can be downloaded at:

<http://assets.nagios.com/downloads/nagiosxi/wizards/nagiosxiserver.zip>

You can upload and install the configuration wizard by selecting the **Manage Config Wizards** link in the **Admin** menu of Nagios XI.

Once you install the wizard, it will be displayed in the list of available configuration wizards.

**Note:** The monitoring wizard requires that both your primary and your offsite Nagios XI instances are running Nagios XI version 2009R1.2B or later.

The screenshot shows the Nagios XI Admin interface. The main content area is titled "Manage Configuration Wizards". Below the title, there is a section for uploading a new wizard with "Browse" and "Upload Wizard" buttons. A table lists the following wizards:

Wizard	Wizard Type	Actions
DHCP Monitor a DHCP server.	Monitoring	[Info] [X]
DNS Query Monitor a host or domain lookup/query via DNS.	Monitoring	[Info] [X]
Email Delivery Test mail server's reception and simulated user's inspection of email messages.	Monitoring	[Info] [X]
Email Server Monitor a IMAP/POP/SMTP email server.	Monitoring	[Info] [X]
WebSensor Monitor temperature, humidity, and light levels on a ESensors WebSensor.	Monitoring	[Info] [X]
FTP Server Monitor login and file transfer capabilities of an FTP server.	Monitoring	[Info] [X]
Generic Network Device Monitor a generic IP network device. Version: 1.0, Author: Nagios Enterprises, LLC, Copyright © 2008-2010 Nagios Enterprises, LLC.	Monitoring	[Info] [X]
LDAP Server Monitor an LDAP server.	Monitoring	[Info] [X]
Linux Server Monitor a remote Linux server.	Monitoring	[Info] [X]
MySQL Server Monitor a MySQL server.	Monitoring	[Info] [X]
Nagios XI Server Monitor a remote Nagios XI server.	Monitoring	[Info] [X]
Peer Tel Asterisk Server	Monitoring	[Info] [X]

## Configuring Monitoring

Once you've installed the XI server monitoring wizard on your offsite Nagios XI instance, you're ready to configure the offsite instance to monitor your primary Nagios XI server.

To get started, select the **Monitoring Wizard** link in the **Config** menu of Nagios XI.

The screenshot shows the Nagios XI Configuration Options page. The user is logged in as 'nagiosadmin'. The page has a navigation menu with 'Home', 'Views', 'Dashboards', 'Reports', 'Configure', 'Help', and 'Admin'. The 'Configure' menu is expanded, showing 'Quick Tools', 'Configuration Wizards', 'Advanced Configuration', and 'More Options'. The 'Monitoring Wizard' link is highlighted under 'Configuration Wizards'. The main content area is titled 'Configuration Options' and asks 'What would you like to configure?'. It lists three options: 'Run the Monitoring Wizard' (to quickly monitor a new device, server, application, or service), 'Enter Nagios Core Configuration Manager' (to configure monitored elements using an advanced web interface), and 'Change Your Account Settings' (to modify account information, preferences, and notification settings).

Next, select the **Nagios XI Server** option in the monitoring wizard.

The image shows the 'Nagios XI Server' option in the monitoring wizard. It features the Nagios XI logo and the text 'Nagios XI Server' and 'Monitor a remote Nagios XI server.'

On the next screen you will be asked to supply the IP address and URL of the primary Nagios XI server.

You will also have to supply the credentials used to login to the primary Nagios XI server's web interface.

## Nagios XI Server Monitoring Wizard - Step 2

The screenshot shows the 'Nagios XI Server' step of the monitoring wizard. It asks for the details of the remote Nagios XI server to be monitored. The 'Address' field contains '192.168.5.102' and the 'URL' field contains 'http://192.168.5.102/nagiosxi/'. Below these fields are instructions: 'The IP address or FQDNS name of the remote Nagios XI server.' and 'The full URL used to the remote Nagios XI server's web interface.' The 'Authentication Credentials' section asks for the username and password used to authenticate to the remote Nagios XI server. The 'Username' field contains 'nagiosadmin' and the 'Password' field contains a masked password. At the bottom, there are 'Back' and 'Next' buttons.

The monitoring wizard will give you options as to what you'd like to monitor on the primary Nagios XI server.

## Nagios XI Server Monitoring Wizard - Step 3



### Nagios XI Server

Address:

Host Name:

The name you'd like to have associated with this Nagios server.  
 Url:

Username:

Password:

### Nagios XI Server Metrics

Specify the metrics you'd like to monitor on the remote Nagios server.

- Ping**  
Checks the server with an ICMP ping. Useful for monitoring network availability of the Nagios server.
- Nagios XI Web Interface**  
Checks the availability of the remote Nagios XI server's web interface.
- Monitoring Daemons**  
Monitors the XI server to ensure the monitoring engine and supporting daemons are running.
- Monitoring Jobs**  
Monitors the XI server to ensure the core jobs are running.
- Load**  
Monitors the load on the server (1/5/15 minute values).  
Warning Load:  Critical Load:
- I/O Wait**  
Monitors the server iowait CPU statistics (a measure of disk read/write wait time).  
Warning Level:  % Critical Load:  %

Once you've completed the wizard setup, you'll be able to see the status of the services and metrics that you're monitoring on the primary Nagios XI server.

### Service Status

Host: 192.168.5.102

#### Host Status Summary

Up	Down	Unreachable	Pending
1	0	0	0
Unhandled	Problems	All	
0	0	1	

Last updated: 2010-07-15 11:12:15

#### Service Status Summary

Ok	Warning	Unknown	Critical	Pending
1	0	0	0	0
Unhandled	Problems	All		
0	0	6		

Last updated: 2010-07-15 11:12:15

Showing 1-6 of 6 total records

Host	Service	Status	Duration	Attempt	Last Check	Status Information
192.168.5.102	HTTP	Ok	27m 54s	1/5	2010-07-15 11:09:22	HTTP OK: HTTP/1.1 200 OK - 366 bytes in 0.001 seconds
	I/O Wait	Ok	26m 45s	1/5	2010-07-15 11:10:31	Ok: I/O Wait = 0.62%
	Load	Ok	25m 38s	1/5	2010-07-15 11:11:40	Load Ok: load1=0.47, load5=0.35, load15=0.33
	Nagios XI Daemons	Ok	24m 27s	1/5	2010-07-15 11:07:49	All daemons are running okay.
	Nagios XI Jobs	Ok	23m 17s	1/5	2010-07-15 11:08:59	All jobs are running okay.
	Ping	Ok	27m 43s	1/5	2010-07-15 11:09:33	OK - 192.168.5.102: rta 0.034ms, lost 0%

Last updated: 2010-07-15 11:12:15

## Finishing Up

That's it for the steps necessary to configure monitoring of your primary Nagios XI server from a remote or offsite location. When your offsite Nagios XI instance detects a problem with your primary Nagios XI server, it will notify the contacts you selected of the problem. You can rest easier knowing your primary server is being monitored with the watchful eye of Nagios.