Purpose

This document describes the hardware requirements for Nagios XI. As each IT infrastructure differs, the hardware requirements for monitoring can vary. For example, the guidelines below assume that you are running active checks. If you are utilizing a large number of passive checks, the requirements are less than the guidelines below.

Requirements

The table below provides hardware recommendations based on a node (host) to service ratio of 1:5.

Monitored Nodes / Hosts	Monitored Services	Hard Drive Space	CPU Cores	RAM
50	250	40 GB	1 − 2	1 − 4 GB
100	500	80 GB	2 − 4	4 − 8 GB
> 500	> 2500	>120 GB	> 4	> 8 GB

Large Installations

For installations monitoring more than 1000 hosts or 5000 services, we generally recommend installing Nagios XI on a physical server as opposed to a VM. Because of shared hardware resources and the way VM's handle process forking, virtual machines may not be able to meet the hardware needs of large environments even with performance enhancements.

Performance Enhancements

Typically, you can get somewhere between 10,000 and a maximum of 20,000 total checks (hosts + services) on a five-minute interval from a single well-provisioned Nagios XI server, but this depends on many factors, including:

- The strength of your monitoring server
- The check interval (shorter interval = higher load)
- Whether the checks are active or passive (passive uses less resources than active)
- The type of plugins being used (for example, SNMP and WMI checks are more resource intensive for Nagios)

Nagios®

There are a number of modifications that you can make to Nagios XI in order to increase performance, and therefore increase the number of nodes and services you can monitor with less hardware. These include:

- Offloading the MySQL database to a remote server
- Using a ramdisk
- Enabling rrdcache
- Leveraging Nagios Mod-Gearman

Information on enabling these performance options can be found in:

Maximizing Performance In Nagios XI

Finishing Up

This completes the documentation on the Hardware Requirements in Nagios XI. 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