

Performance Tuning In Nagios Fusion 2024

Purpose

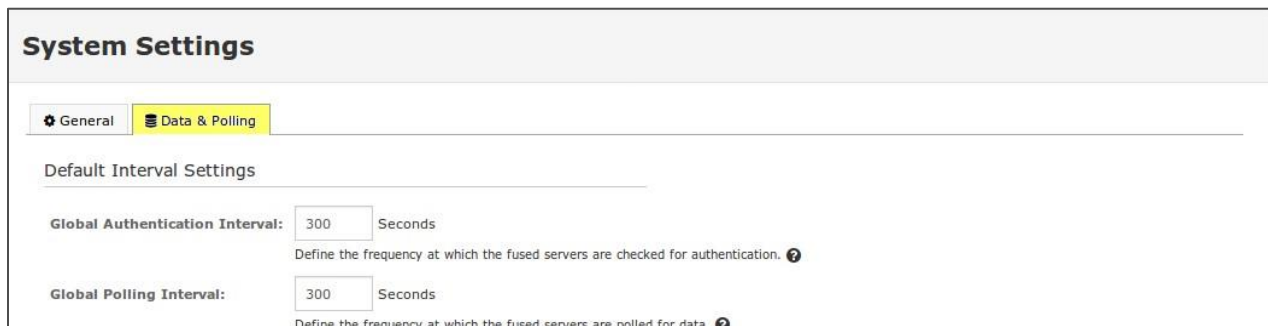
Nagios Fusion functions as a high-level dashboard for multiple instances of Nagios XI, Nagios Network Analyzer, Nagios Core, and Nagios Log Server instances. In larger deployments of Nagios XI and Nagios Core, tuning certain performance settings may be necessary to improve response times and reduce the overall load on the Fusion server. Nagios Fusion allows performance settings to be adjusted globally or per fused server. This document describes how to configure these performance settings effectively.

Global Settings

The **Global Settings** can be adjusted by navigating to **Admin > System Configuration > System Settings > Data & Polling**.

Default Interval Settings

- **Global Authentication Interval**
 - Define the frequency (seconds) at which the fused servers are checked for authentication
 - Authentication is a single check against the server to ensure both connectivity (information used for polling) and that the specified credentials are still correct
 - You want to keep this value relatively low
 - You can override this setting on a per-server basis ([Per Fused Server Settings](#))
- **Global Polling Interval**
 - Define the frequency (seconds) at which the fused servers are polled for data
 - Larger systems may be able to benefit from a larger number here
 - You can override this setting on a per-server basis ([Per Fused Server Settings](#))



The screenshot shows the 'System Settings' interface in Nagios Fusion, specifically the 'Data & Polling' tab. Under the 'Default Interval Settings' section, there are two configuration items: 'Global Authentication Interval' and 'Global Polling Interval'. Both are currently set to 300 seconds. Each item has a text input field, a 'Seconds' label, and a help icon. The help text for 'Global Authentication Interval' reads: 'Define the frequency at which the fused servers are checked for authentication.' The help text for 'Global Polling Interval' reads: 'Define the frequency at which the fused servers are polled for data.'

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Polling Configuration

- **Polling Subsystem Memory Limit**
 - The maximum amount of memory that a poller may consume while running
 - This is same value that would be accepted by `php.memory_limit`
 - Acceptable values can be:
 - 128M = 128 Megabytes
 - 1G = 1 Gigabyte
 - -1 = unlimited memory
 - If you're connecting to large systems, you may want to keep this value high
- **Simultaneous Pollers**
 - The maximum number of pollers that Fusion can spawn to grab data
 - 1 poller should be sufficient
 - If you're connecting to at least one large system, you'll want to increase this value so that the polling subsystem doesn't get choked waiting on a large batch of API calls
 - A decent formula in that case would be at least one poller for every fused server
- **Live Data Timeout**
 - The length of time (seconds) that Fusion waits for a chunk of data from a fused server before timing out
 - This is the timeout value for each individual API call made to a fused server
 - This can be kept relatively low unless you are connected to a large Nagios Core install
- **Polling Lock Max Age**
 - The maximum amount of time (seconds) that a poller can take while grabbing data from a fused server
 - If something goes wrong with a poller, and it can't remove the lock on the fused server it's grabbing data from, then this is the amount of time that the subsystem will wait before it spawns a new poller

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- **Poll Record Count**

- The number of records to grab in a single API call to a fused server
- When fusion polls the data, it calls the API and grabs only a handful of records at a time
- This is the value you set to determine the number of records it grabs
- If you don't have any fused servers that are large systems, then you can keep this number very high

Polling Configuration

Polling Subsystem Memory Limit:	<input type="text"/>	The maximum amount of memory that a poller may consume while running. ?
Simultaneous Pollers:	<input type="text" value="1"/> Pollers	The maximum number of pollers that Fusion can spawn to grab data. ?
Live Data Timeout:	<input type="text" value="45"/> Seconds	The length of time that Fusion waits for a chunk of data from a fused server before timing out. ?
Polling Lock Max Age:	<input type="text" value="1200"/> Seconds	The maximum amount of time that a poller can take while grabbing data from a fused server. ?
Poll Record Count:	<input type="text" value="1000"/> Records	The number of records to grab in a single API call to a fused server. ?

Database Retention Settings

- **Log Data Retention**

- The maximum amount of time (days) to retain log data in the database
- If you have debug data being written to the database, you'll want to keep this value as low as 1 or 2 days while that's enabled
- Having the log data in the database allows for a nice interface where you can view recent logs, but this is not meant as a replacement for the log file

Database Retention Settings

Log Data Retention:	<input type="text" value="5"/> Days	The maximum amount of time to retain log data in the database. ?
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Per Fused Server Settings

Navigate to **Admin > Servers > Managed Fused Servers**. The settings that can be adjusted per fused server can be defined when adding a new fused server or by editing an existing fused server.

Polling Settings

- **Authentication Interval**
 - Define the frequency at which this server is checked for authentication
 - Authentication is a single check against the server to ensure both connectivity (information used for polling) and that the specified credentials are still correct
 - You want to keep this value relatively low
- **Polling Interval**
 - Define the frequency at which this server is polled for data
 - Larger Nagios XI and Core systems will benefit from a larger number here, because it can take longer to poll and process data for these large systems.
- **Ignore XI host/service meta data**
 - Only check this box if you have an extremely large system
 - This only applies to XI servers that you're fusing to. Meta data refers to the following:
 - Hosts and Services that are disabled
 - Host and Service acknowledgment information
 - Hosts and Services that are flapping
 - Hosts and Services that are in downtime
 - For a large system, this can allow you to set a much lower value for the polling interval, as poll speed is reduced by up to 70%
 - This is not recommended for an XI system with less than 20,000 Host and Service checks

The screenshot shows the 'Polling Settings' configuration page. It contains three main sections: 'Authentication Interval' with a text input field set to '300' and a 'Seconds' label, followed by a help icon and a descriptive text; 'Polling Interval' with a text input field set to '300' and a 'Seconds' label, followed by a help icon and a descriptive text; and a checkbox labeled 'Ignore XI host/service meta data' with a help icon. Below the checkbox is a red warning message: 'Enabling this option is not recommended unless you have an extremely large system.'

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Finishing Up

This completes the documentation on performance tuning in Nagios Fusion. 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](#)

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[Visit Nagios Library](#)