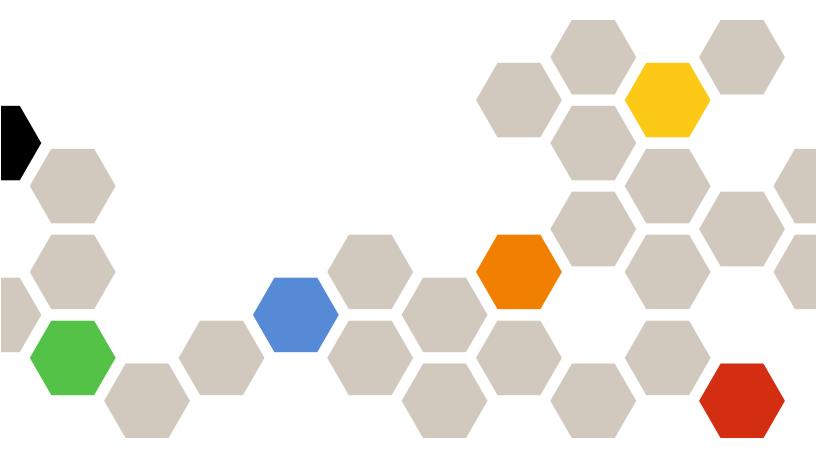


# Lenovo XClarity Integrator for Nagios Installation and User's Guide



Version 1.0

Note
Before using this information and the product it supports, read the information in Appendix A "Notices" on page 7.
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# **About this publication**

This book provides instructions for installing and using Lenovo XClarity Integrator for Nagios.

Lenovo XClarity Integrator for Nagios is a plugin for Nagios that allows status and alert monitoring of the devices that are managed by Lenovo XClarity Administrator. These insights can help systems administrators find potential problems in their environment

# **Conventions and terminology**

Paragraphs that start with a bold **Note**, **Important**, or **Attention** are notices with specific meanings that highlight key information.

Note: These notices provide important tips, guidance, or advice.

**Important:** These notices provide information or advice that might help you avoid inconvenient or difficult situations.

**Attention:** These notices indicate possible damage to programs, devices, or data. An attention notice appears before the instruction or situation in which damage can occur.

#### PDF and web resources

This product publication is available in PDF format.

Installation and User's Guide

To view a PDF file, you need Adobe Reader. You can download it at no charge from the <u>Adobe Acrobat website</u>.

Use the following links to learn more about Lenovo XClarity Integrator for Nagios and related resources.

- Lenovo XClarity Integrator for Nagios Support webpage
- Nagios webpage
- Lenovo XClarity Administrator online documentation

# **Chapter 1. Lenovo XClarity Integrator for Nagios**

Lenovo XClarity Integrator for Nagios is a plugin for Nagios that allows status and alert monitoring of the devices that are managed by Lenovo XClarity Administrator. These insights can help systems administrators find potential problems in their environment

XClarity Integrator for Nagios supports the following features.

- View hardware status and alerts for Lenovo hardware that is managed by XClarity Administrator XClarity Integrator for Nagios supports all device types that are supported by XClarity Administrator, including servers, storage, and switches.
- Sends an email to an administrator when a new alert is asserted or de-asserted
- Works with other variations, such as Check\_MK

**Note:** Device status and alerts *are not* provided in real-time. The frequency in which alerts and status is retrieved based 1.5 times the check-interval setting that is configured in Nagios.

# Chapter 2. Planning and setting up Lenovo XClarity Integrator for Nagios

Use this procedure to plan for and set up Lenovo XClarity Integrator for Nagios.

### **Software requirements**

The following requirements must be met.

- Lenovo XClarity Administrator v2.0 or later
- Nagios core
- Python v2.7 with PIP (Requests, keyring, and keyrings.alt packages installed)

# Supported devices

Lenovo XClarity Integrator for Nagios supports all device types that are supported by Lenovo XClarity Administrator, including servers, storage, and switches.

For more information, see <u>Supported devices</u> in the XClarity Administrator documentation.

# **Setting up Lenovo XClarity Integrator for Nagios**

Use these steps to setup Lenovo XClarity Integrator for Nagios.

#### Before you begin

Ensure that Nagios can connect to the target Lenovo XClarity Administrator.

Ensure that ports to the SMTP server are open.

Ensure that XClarity Administrator manages one or more devices that have alerts so that you can verify the setup.

By default, XClarity Integrator for Nagios uses python **sendmail** for sending emails. You can also choose to use the standard email plugin that you use for all other plugins by configuring the email function in XClarity Integrator for Nagios script or use the use the standard Nagios e-mail function which is defined in the commands.cfg file.

**Important:** When copying code snippets from this topic, pay special attention to the end-of-line characters, as they are different in Windows and Linux.

#### **Procedure**

To set up XClarity Integrator for Nagios, complete the following steps.

Step 1. Download XClarity Integrator for Nagios (xclarity\_integrator\_check.py) to the /usr/local/nagios/libexec directory

**Note:** You can download XClarity Integrator for Nagios from the <u>Nagios Exchange website</u> or Lenovo Support website.

Step 2. Optional: Edit the **xclarity\_integrator\_check.py** Python script, and modify the location of the log\_alerts, log\_nodes, log\_mail and certificate.pem.

By default, the script creates and saves these files in the /home/nagios/logs directory.

Step 3. Run the xclarity\_integrator\_check.py generate\_credentials command to set up XClarity Integrator for Nagios (for example /usr/local/nagios/libexec/xclarity\_integrator\_check.py generate\_credentials).

Important: You must run this command as the user that runs the Nagios instance.

- Step 4. When prompted, specify the user name, password and URL to the LXCA instance (URL example: https://192.0.2.0) to use to authenticate with XClarity Administrator.
- Step 5. Update the Nagios configuration files in the /usr/local/nagios/etc/objects directory to add the new plugin.

#### · commands.cfg

Add the following definitions for the XClarity Integrator for Nagios plugin to send emails and verify the target XClarity Administrator.

**Important:** The options that are specified for the **command\_line** function in the following definitions are appended with two dashes.

#### localhost.cfg

Add the following definition for the XClarity Integrator for Nagios plugin.

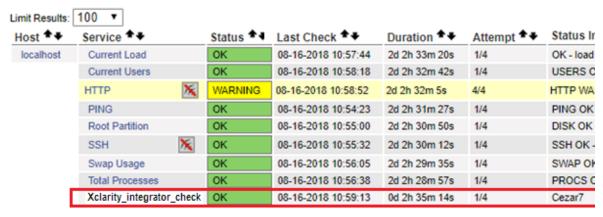
#### · contacts.cfg

Add the following definitions to define the email address of the contact or contact group that is to receive emails notifications.

#### Where:

- contact name. Short name for the contact
- use. Always set this value to "generic-contact"
- alias. Full name for the contact

- service\_notification\_commands. To use Mailx for sending and receiving emails, set this
  parameter to the value of the command\_name parameter in the commands.cfg file (for
  example, notify-by-email). To use the standard Nagios email plugin, omit this parameter.
- email. Contact email address
- Step 6. Restart Nagios for the changes to take effect.
- Step 7. From the Nagios portal, verify that "xclarity\_integrator\_check" is listed as a service under localhost.



- Step 8. Click xclarity\_integrator\_check to display the current status, and verify the status is "OK."
- Step 9. Create an alert condition in the target XClarity Administrator. Verify that an email is sent to the specified contacts, for example:

  \*\*\*\*\* Nagios \*\*\*\*\*\*

Notification Type: PROBLEM

Service: xclarity integrator check

Host: localhost Address: 192.0.2.0 State: CRITICAL

Date/Time: Wed Jul 25 08:15:54 EDT 2018

Additional Information:

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Node: SR530 with IP: 192.0.2.10, 192.0.2.11, is in Critical state with the following alerts:

All CPUs have failed with ERROR.

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# **Important notes**

Processor speed indicates the internal clock speed of the microprocessor; other factors also affect application performance.

When referring to processor storage, real and virtual storage, or channel volume, KB stands for 1 024 bytes, MB stands for 1 048 576 bytes, and GB stands for 1 073 741 824 bytes.

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