

# Lenovo XClarity Integrator for Microsoft Azure Log Analytics 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 15.

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# About this publication

This book provides instructions for installing and using Lenovo XClarity Integrator for Microsoft Azure Log Analytics.

Lenovo XClarity Integrator for Microsoft Azure Log Analytics is a plug-in for Microsoft Azure Log Analytics that integrates with Lenovo XClarity Administrator to enable event management for Lenovo hardware.

## **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 Adobe Acrobat website.

Use the following resources to learn more about Lenovo XClarity Integrator for Microsoft Azure Log Analytics.

- <u>Azure Log Analytics</u>
- Log Analytics alerting functionality
- Lenovo XClarity Administrator
- Azure Log Analytics pricing

# Chapter 1. Lenovo XClarity Integrator for Microsoft Azure Log Analytics

Lenovo XClarity Integrator for Microsoft Azure Log Analytics lets you analyze events from Lenovo XClarity Administrator and the devices that it manages. These insights can help systems administrators find potential problems in their environment.

Lenovo XClarity Integrator solution includes six views that you can use to monitor events from your connected XClarity Administrator instances.

#### Lenovo XClarity

This is the high-level dashboard that gives you the summary of all types of events coming from your XClarity Administrator instances. Drilling down from each graph takes you to corresponding Lenovo XClarity views.

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Lenovo XClarity Clarify Lesee XClarit ©	Overview 200 100 100 100 100 100 100 100	Provisioning
Lenovo XClarity	Security Logins	Power and Thermal
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apprication programming interfaces (MHG or using Activity Integrator software plugins, and Windows PowerShell scripts.	Security Changes	Events Recommending Service
You can read more about the capabilities here.	Non-the second s	ik .
	6:00 PM 12:00 KM 6:00 KM 12:00 PM	- 600 PM 1200 ANI 600 ANI 1200 PM

#### Lenovo XClarity – Overview

This view provides a summary of all events and alerts in XClarity Administrator. It also provides a list of basic queries that you can use to drill down into various issues.



#### Lenovo XClarity – Security

This view provides a summary of user logins and changes to user accounts and security policies.

Time Coston King store				
time: Custom time range				
ECURTY - LOGINS			SECURITY - OWNGES	
Unsuccessful authentications grouped by IP address	Failed logins		Accounts created and deleted	Numbe
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for all	600 PW 1200 AM	600 AM 10.00 PV	600 PM 1000 AM 600 AM 1000 PM	

#### Lenovo XClarity – Provisioning

This view provides a summary of provisioning tasks, including firmware updates, server configuration, and operating-system deployments.



#### Lenovo XClarity – Power and Thermal

This view provides a summary of events that identify managed devices that exceeded power, thermal, and battery thresholds.



#### Lenovo XClarity – Events Recommending Service

This view provides a summary of predicted failure alert (PFA) events, critical events from managed devices, and serviceability events.

C Refresh	Analytics	Filter 🖋 Edit 🗖	Clone	
Time: Custo	om time range			
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PFA events	received			
in cremp				- E
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5k				
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	0.00 PM	12VV PM	6100 AM	ICOV PM
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Critical error	rs from managed	hardware		CRITICAL
Critical error	rs from managed	hardware		CRITICAL
Critical error	rs from managed	hardware		CRITICAL
Critical error 0.8 0.6 0.4 0.2	rs from managed	hardware		CRITICAL
1 0.8 0.6 0.4 0.2	rs from managed	hardware 1200 AM	600 AM	CRITICAL 1200 PM
1 0.8 0.6 0.4 0.2	600 PM	hardware 1200 AM	600 AM	CRITICAL 1200 PM
Tritical error 0.8 0.6 0.4 0.2 Events grou	600 PM ped by serviceabi	hardware 1200 АМ	6100 <sup>°</sup> AM	CRITICAL 1200 PM
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Critical error 0.6 0.4 0.2 Events grou 10k 5k	600 PM ped by serviceabi	hardware 1200 AM lity	600 AM	CRITICAL 1200 PM

# Chapter 2. Planning and setting up Lenovo XClarity Integrator for Microsoft Azure Log Analytics

Use this procedure to plan for and set up Lenovo XClarity Integrator for Microsoft Azure Log Analytics.

## **Software requirements**

The following requirements must be met.

- Lenovo XClarity Administrator v2.0 or later
- Azure Subscription
- Microsoft Azure Log Analytics workspace (which can be created during configuration)
- Azure Automation account linked to the Microsoft Azure Log Analytics workspace (which can be created during configuration)

**Note:** The solution charges based on the Microsoft Azure Log Analytics pricing tier. The automation account does not create additional charges but is required only for configuration.

## Setting up Lenovo XClarity Integrator for Microsoft Azure Log Analytics

To connect your Lenovo XClarity Administrator instance to your Log Analytics workspace, you need to apply changes separately on both products. Lenovo XClarity Integrator configuration enables you to collect events in your Log Analytics environment, and Log Analytics changes enable you to visualize data. Follow the steps listed below to get started.

- Step 1. Configure your Microsoft Azure Log Analytics workspace.
  - a. Log in to Azure from the <u>Azure web portal</u>.
  - b. Go to Azure Marketplace by clicking **Create a resource**.

	K Home > New	
Create a resource	New	• ×
All services	Q Search the Marketalace	
FAVORITES	Azure Marketplace See all	Popular
Dashboard	Get started	Windows Server 2016 VM
All resources	Recently created	Quickstart tutorial
Resource groups	Compute	Ubuntu Server 16.04 LTS VM
App Services	Networking	Quickstart tutorial
Function Apps	Storage	Web App Quickstart tutorial
SQL databases	Containers	
Azure Cosmos DB	Databases	SQL Database Quickstart tutorial
Virtual machines	Data + Analytics	Cosmos DR
Load balancer	AI + Cognitive Services	Quickstart tutorial
Load balancers	Internet of Things	
Storage accounts	Enterprise Integration	Quickstart tutorial
	A 3 11 12	

c. Search for "Lenovo XClarity," and then select Lenovo XClarity Solution from the list.

«	Home > New > Marketplace > 8	verything	
+ Create a resource	Marketplace 🖈 🗙	Everything	* 🗆 ×
i≣ All services	Everything	<b>T</b> Filter	
+ FAVORITES	Compute	🔎 Lenovo XClarity	
🔜 Dashboard	Web + Mobile	0	)
Resource groups	Data + Storage	Results	
All resources	Data Analytics	NAME	PUBLISHER CATEGORY
Recent	Internet of Things	Lenovo XClarity Solution	Lenovo Data Analytics
🧧 SQL databases	Networking		
Azure Active Directory	Media + CDN		
Subscriptions	Hybrid Integration		
Automation Accounts	Security + Identity		

d. Click **Create** to enable Log Analytics to collect logs from XClarity Administrator and its managed devices.

e. Provide the Log Analytics workspaces.

If you have a Log Analytics workspace, select it from the list. If you do not create a new workspace by clicking **Create New Workspace**. For more information about creating a Log Analytics workspace, see the <u>Microsoft Azure: Create a workspace webpage</u>.



f. Select the Automation Account to link to the workspace.

If you have an automation account that is linked to the selected Log Analytics workspace, the account automatically selected. If you do not have an automation account for the selected Log Analytics workspace, you can create one by clicking **Create an Automation account**.

**Note:** The automation account is only needed for setup. It is not used later to facilitate the view.



- g. Click Create.
- h. Check the progress of the deployment by clicking the Notifications icon in the toolbar.



i. After the deployment is completed, click **Overview** from the Log Analytics workspace.



j. Verify that the Lenovo XClarity views are deployed in your workspace

**Note:** The views start displaying events only after event forwarding is configured on your XClarity Administrator instances.

Home > lenovo-datacentergroup-innovation > Overview		
Overview		
Ö Refresh ∔ Add ≝ Analytics ▼ Filter		
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0.5 0.5 0.0 200 200 200 200 200 200 200 200 200	1 NED ATTENTION ATTENTION NUCLEAR Active Threats 0 Remediated Threats 0 Insufficient Protection 1	825.5K TOTA, Pull 825.5K
Lenovo XClarity	Lenovo XClarity - Events Recommending	Lenovo XClarity - Overview
90 70% 5% 600 PM 12:00 AM 6:00 AM 12:00	бой РМ 1230 АМ 620 АМ 1250	2000 1500 50 6.00 PM 12:00 AM 6:00 AM 12:00
Lenovo XClarity - Power And Thermal	Lenovo XClarity - Provisioning	Lenovo XClarity - Security
40 20 600 PM 12:00 AM 6:00 AM 12:00	00 00 00 00 00 00 00 00 00 00	800 200 100 600 PM 1200 AM 600 AM 1200

- k. You can pin any of the views on your Azure Dashboard for easy access. Right-click the tile and select **Pin to Dashboard**.
- Step 2. Configure your XClarity Administrator instances to forward events to your Log Analytics workspace. For information about configuring event forwarding, see the <u>XClarity Administrator online</u> <u>documentation</u>

# **Configuring alerts**

Lenovo XClarity - Overview view integrates with the Log Analytics Alert Management solution. The Alerts blade shows alerts that are generated by your custom-defined rules.

For your alerts to show up in Lenovo XClarity - Overview view, you must name your alerts as "Lenovo\_ XClarity\_<*my\_alert\_name*>" (for example, Lenovo\_XClarity\_Alert Severity)" The blade shows only alerts that match the "Lenovo\_XClarity" keyword.

Drill down to Alert Manage	ment Solution
240 TOTAL	ormational <b>10</b>
ALERT NAME	COUNT
ALERT NAME LenovoXClarity_Alert Severity	COUNT 240

# Appendix A. Notices

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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.

When referring to hard disk drive capacity or communications volume, MB stands for 1 000 000 bytes, and GB stands for 1 000 000 000 bytes. Total user-accessible capacity can vary depending on operating environments.

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