Lenovo XClarity One
Product Guide

Lenovo XClarity One is a management-as-a-service offering for hybrid-cloud management of on-premises data-center assets. XClarity One makes use of local management hubs across multiple sites to collect inventory, incidents, and service data, and to provision resources.

XClarity One provides a modern, intuitive interface that centralizes IT orchestration, deployment, automation, and support from edge to cloud, with enhanced visibility into infrastructure performance, usage metering, and analytics.
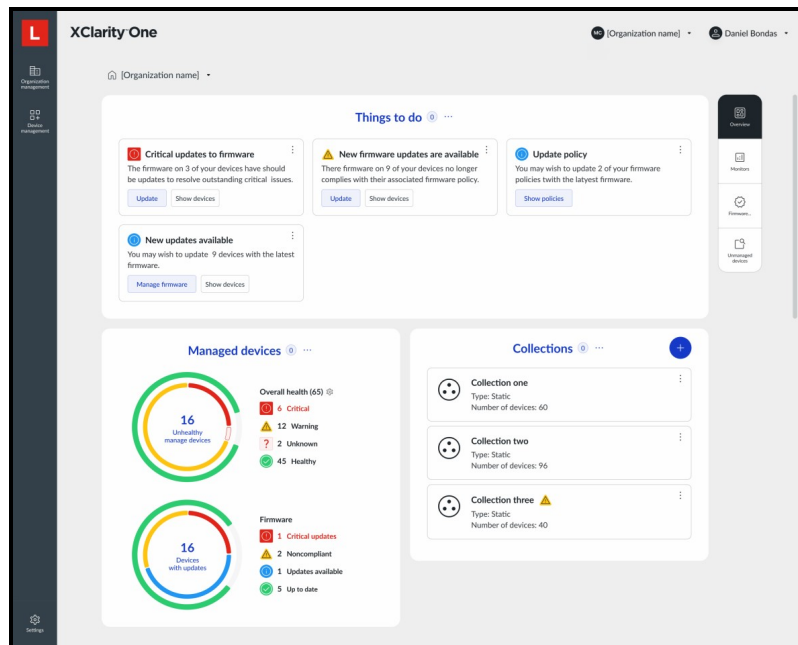

Figure 1. Lenovo XClarity One dashboard

Did you know?

XClarity One is the next milestone in Lenovo's portfolio of systems management products. Now you can leverage the benefits of a true next-generation, hybrid cloud-based solution for the deployment, management, and maintenance of your infrastructure through a single, centralized platform that delivers a consistent user experience across all Lenovo products.

XClarity One is designed to know what you need before you need it and improve operational efficiency while keeping your data and devices secure from external threats. The predictive analytics engines swiftly identify potential issues and minimize system downtime by accurately pinpointing problems without unnecessary component replacements.

Ordering information and downloads

The part numbers are listed in the following table.

Table 1. Download and ordering information

Part number	Description
7S0X000LWW	XClarity One - Managed Device, Per Endpoint w/1 Yr SW S&S
7S0X000MWW	XClarity One - Managed Device, Per Endpoint w/3 Yr SW S&S
7S0X000NWW	XClarity One - Managed Device, Per Endpoint w/5 Yr SW S&S
7S0X000PWW	XClarity One - Memory PFA MD Option w/1 Yr SW S&S
7S0X000QWW	XClarity One - Memory PFA MD Option w/3 Yr SW S&S
7S0X000RWW	XClarity One - Memory PFA MD Option w/5 Yr SW S&S

When you purchase XClarity One, the customer will receive a POE (Proof of Entitlement) email. On that email is the customer number and URL to which the customer needs to register for usage of the XClarity One product.

Registration and use of the XClarity One solution is through the XClarity One Portal, https://xc1.lenovo.com/

Once you register, you will also be given instructions on how to download the XClarity One Management Hub.

Features

Lenovo XClarity One has the following features:

- XClarity One dashboard
- Firmware management
- Security

Lenovo XClarity One monitors and manages devices through one or more light-weight device managers, called management hubs. The management hubs run as a virtual appliance on premises in your datacenters, across multiple sites, where your devices are located, to provide ifast response times, low latency, and data security.

Lenovo XClarity Management Hub 2.0 is the supported management hub for management and provisioning of supported Lenovo devices in a secure environment.

The following figure shows the architecture of the XClarity One infrastructure including the logical locations of the Management hub(s).
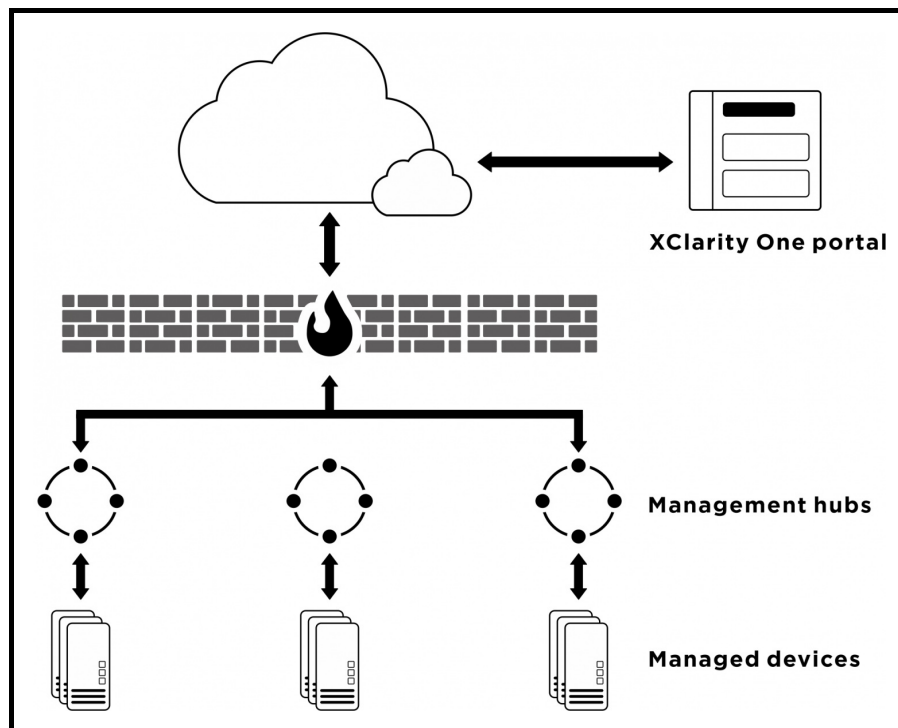
Figure 2. XClarity One infrastructure

XClarity One dashboard

The XClarity One dashboard is a cloud-based interface that allows fast location of resources so tasks can be run quickly. The dashboard is shown in Figure 1.

This hub reduces your security risk through using only a single secure connection between the XClarity One Portal and on-premises/private cloud-managed devices.

Lenovo XClarity One delivers Lenovo resources faster. With a simplified administration dashboard, the following functions can be easily achieved:

- Discovery
- Inventory
- System Health & Monitoring
- Alerts & Events
- Firmware Updates
- Remote Control
- Call home, Service Data Upload and Ticket Status monitoring
- Predictive Failure Analytics
- Simplified Upward Integration
- Risk Mitigation & Resiliency
- Controlled Infrastructure Accessibility

Fast time to value is realized through automatic discovery of existing or new Lenovo rack servers. Inventory of the discovered endpoints is gathered, so the managed hardware inventory and its status can be viewed-at-a-glance.

A centralized view of events and alerts that are generated from managed endpoints is available. When an issue is detected by a managed endpoint, an event is passed to Lenovo XClarity One. Alerts and events are visible via the XClarity One Dashboard, the Status bar, and the Alerts and Events detail for the specific system.

Firmware management

Firmware management is simplified by assigning Firmware-compliance policies to supported managed endpoints to ensure that firmware on those endpoints remains compliant. You can also create and edit firmware-compliance policies when validated firmware levels do not match the suggested predefined policies. Additionally, you can also apply and activate firmware that is later than the currently installed firmware on a single managed endpoint or group of endpoints without using compliance policies.

Security

Lenovo XClarity One includes several features that can help you secure your environment. Security features include:

- If you must be compliant with NIST SP 800-131A or FIPS 140-3, XClarity One can help you meet that compliance. XClarity One supports self-signed SSL certificates (issued by an internal certificate authority) or external SSL certificates (private or commercial CA).

- Two-factor authentication is required for all users.

- You have the ability to disable individual management functions which further limits external exposure. (edit)

- XClarity One includes an audit log that provides a historical record of user actions, such as logging on, creating users, or changing user passwords.

Management tasks

By using Lenovo XClarity One, users can perform the following tasks that are described in this section.

- User Management
- Hardware monitoring
- Firmware updates

User Management

Lenovo XClarity One provides a centralized authentication server to create and manage all user accounts and to manage and authenticate user credentials. The authentication server is created automatically when the management server first starts. The User accounts, which are used to log on and manage XClarity One, can also be used for all chassis and servers that are managed by XClarity One. When you create a user account, you control the level of access, such as whether the account has read/write authority or read-only authority, by using role groups.

When devices are initially managed by XClarity One, a predefined set of role groups can have permission to access the devices by default. This predefined set is empty by default until it is configured. You can change the role groups that can access specific managed devices. When permission is given to certain role groups, only users that are members of those role groups can see and act on those specific devices.

By default, devices are managed using XClarity One managed authentication to log in to the devices. When managing rack servers and Lenovo chassis, you can choose to use managed authentication or local authentication to log in to the devices.

The following figure shows the XClarity One interface for security and user management.
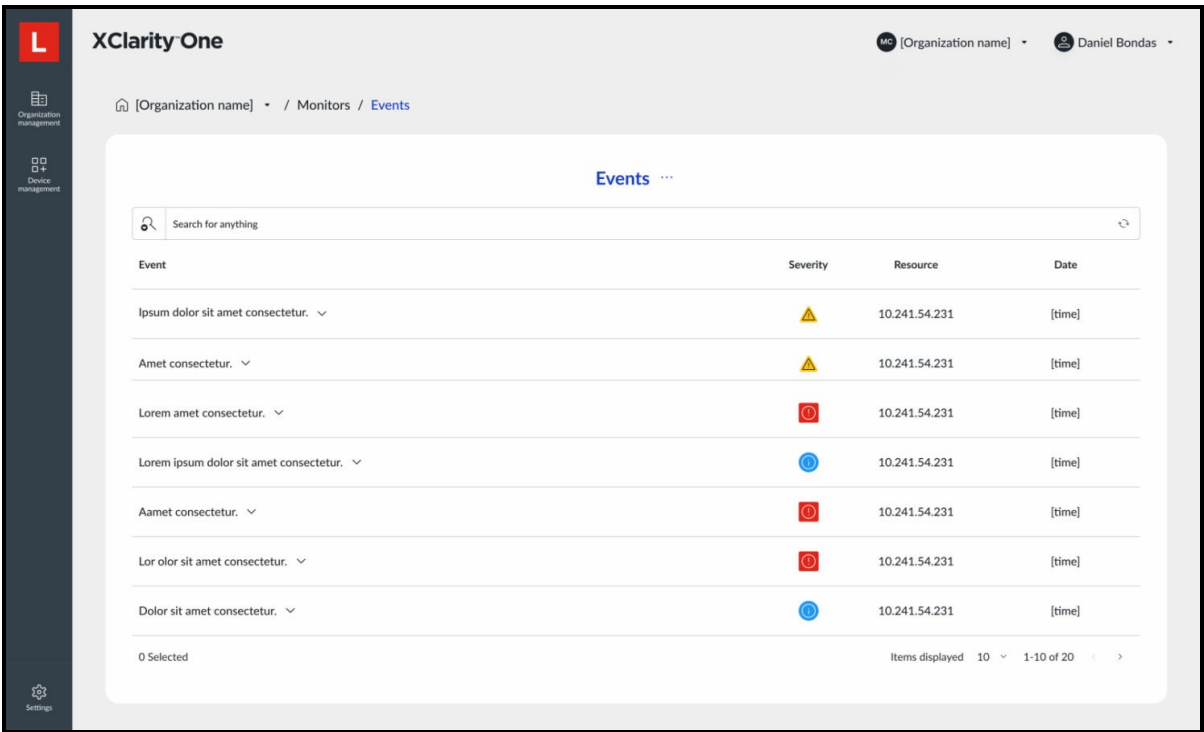

Figure 3. User management

Hardware monitoring

Lenovo XClarity One provides a centralized view of events and alerts that are generated from managed endpoints, such as chassis components, servers, storage devices and network switches.

When an issue is detected, an event is passed to XClarity One. That event is then displayed in the alerts list that is available within the user interface. A status bar also is available that provides overall status information on the main XClarity One interface.

An example list of alerts is shown in the following figure. This view can be filtered to show specific alert severity. Additionally, the view can also be filtered by dates and alert sources or via the search filter.

Figure 4. Alerts and actions

Firmware updates

Within XClarity One, you can manage the firmware updates repository and apply and activate firmware updates for managed endpoints.

Lenovo XClarity One uses the management hubs to apply firmware updates to your managed devices. When you initiate a firmware update from the XClarity One portal, XClarity One pushes the required update packages to the appropriate management hub and then sends a request to hub to apply the update on the target devices.

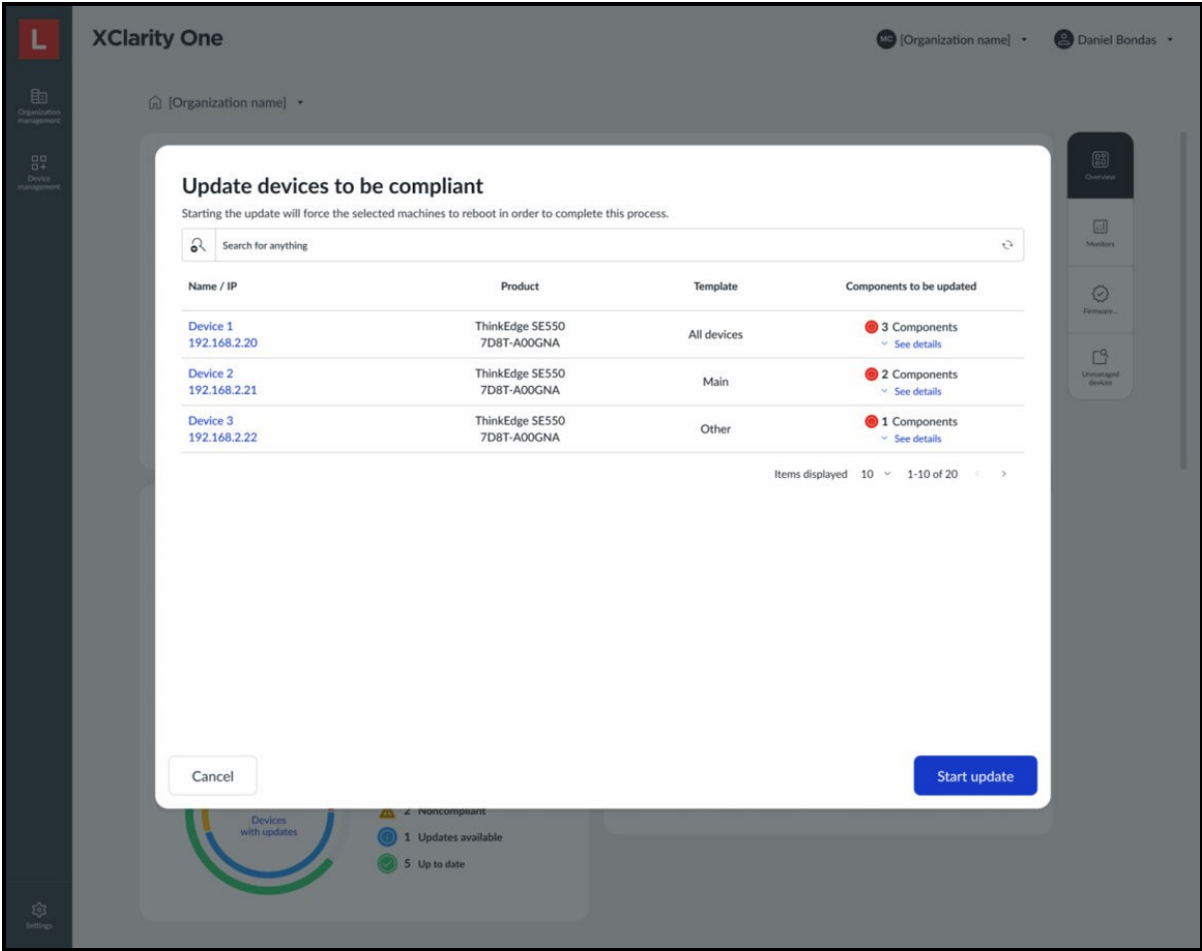For more information, please see the online documentation:
https://pubs.lenovo.com/lxc1/devices-fw-updates

Figure 5. Firmware updates

Hardware requirements

The host system that is running the Lenovo XClarity One Management Hub has the following minimum requirements.

Supported virtual appliances:

- VMware EXSi & vCenter: OVA (.ova file)
- Linux & Nutanix: KVM (.qcow2 file)
- Microsoft: Hyper-V (.vhd file)

The following table lists the recommended processors and memory of the host, based on the number of managed devices.

Table 2. Processor and memory requirements

Managed Devices	Processors	Memory
1 – 1,000 Devices	2	2 GB
1,001 – 2,000 Devices	3	4 GB
2,001 – 3,000 Devices	4	8 GB
3,001 – 4,000 Devices	5	12 GB
4,001 – 5,000 Devices	6	16 GB

For more information about minimum hardware recommendations based on the number of managed devices in your environment, see the following pages:

- https://pubs.lenovo.com/lxc1/install-lxc1hub-prereqs

- https://support.lenovo.com/us/en/solutions/ht516492

Supported endpoints

Supported endpoints include:

- ThinkSystem servers and compute nodes
- Flex System Compute Nodes
- ThinkEdge Servers
- ThinkAgile solutions
- Lenovo storage

For a detailed list of devices supported to be managed by XClarity One, see the XClarity One publications home page:
https://pubs.lenovo.com/lxc1/

Additional information is available at the following Management Hub 2.0 Support page:
https://support.lenovo.com/us/en/solutions/ht516492

Seller Training Courses

The following sales training courses are offered for employees and partners (login required). Courses are listed in date order.

1. **Lenovo XClarity One: Overview**
   2024-10-08 | 30 minutes | Employees and Partners

   In this course you will learn about ways to initiate and conduct a conversation about Lenovo XClarity One. Lenovo XClarity One is a cloud-based, unified software management platform, that integrates TruScale Infrastructure as a Service, Management as a Service, and Smarter Support Analytics to simplify orchestration, automation, and metering from the edge to the cloud. By the end of this course, you will be able to describe the Lenovo XClarity One software, identify the main Features and Benefits of XClarity One, and discover the available XClarity One Contacts and Resources.

   Published: 2024-10-08
   Length: 30 minutes

   Start the training:
   Employee link: Grow@Lenovo
   Partner link: Lenovo Partner Learning

   Course code: DXCOO101r2

2. **Q2 Solutions Launch TruScale GPU Next Generation Management in the AI Era Quick Hit**
   2024-09-10 | 6 minutes | Employees and Partners

   This Quick Hit focuses on Lenovo announcing additional ways to help you build, scale, and evolve your customer's private AI faster for improved ROI with TruScale GPU as a Service, AI-driven systems management, and infrastructure transformation services.

   Published: 2024-09-10
   Length: 6 minutes

   Start the training:
   Employee link: Grow@Lenovo
   Partner link: Lenovo Partner Learning

   Course code: SXXW2543a

3. **Partner Technical Webinar - XClarity One and Systems Management Strategy**
   2024-03-18 | 60 minutes | Employees and Partners

   In this 60-minute replay, Kenny James, Director of Lenovo Channel Sales presented Systems Management. Kenny discussed Lenovo's Systems Management strategy include current XClarity products, XClarity One, and AIOps.

   Published: 2024-03-18
   Length: 60 minutes

   Start the training:
   Employee link: Grow@Lenovo
   Partner link: Lenovo Partner Learning

   Course code: 031524

4. **VTT: XClarity One Status - October 2023**
   2023-10-12 | 27 minutes | Employees Only

   XClarity One successfully launched the early preview Alpha program in August. In this session I will give an update on the status of XC1, it's short-term roadmap and the program experiences to date. As a focus, I will also discuss the key customer feedback we have received. Please come with your questions and suggestions.

   Published: 2023-10-12
   Length: 27 minutes

   > **Start the training:**
   > Employee link: Grow@Lenovo

   Course code: DVSYS205

5. **XClarity One Preview**
   2022-09-16 | 2 minutes | Employees and Partners

   This Quick Hit introduces Lenovo XClarity One, an easy-to-use environment that combines multiple software platforms, including IaaS, service support, management, deployment, and orchestration, into a single software portal.

   Published: 2022-09-16
   Length: 2 minutes

   > **Start the training:**
   > Employee link: Grow@Lenovo
   > Partner link: Lenovo Partner Learning

   Course code: SXXW2505a

Related links

For more information, see the following resources:

- Lenovo XClarity One product page:
  https://www.lenovo.com/us/en/servers-storage/software/xclarityone/
- Lenovo XClarity One portal:
  https://xc1.lenovo.com
- Lenovo XClarity One User Guide:
  https://pubs.lenovo.com/lxc1/
- XClarity One Management Hub 2.0 Support page:
  https://support.lenovo.com/us/en/solutions/ht516492

Related product families

Product families related to this document are the following:

- Lenovo XClarity

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