Introduction to Managing ThinkSystem SR635 and SR655 Servers with Lenovo XClarity Administrator
Planning / Implementation

The Lenovo ThinkSystem SR635 and SR655 are single-socket servers that features the AMD EPYC 7002 and EPYC 7003 families of processors. With up to 64 cores per processor and support for the PCIe 4.0 standard for I/O, these servers offer the ultimate in single-socket server performance.

Lenovo XClarity Administrator is a centralized, resource-management solution that simplifies infrastructure management, speeds responses, and enhances the availability of Lenovo® server systems and solutions. It runs as a virtual appliance that automates discovery, inventory, tracking, monitoring, and provisioning for server, network, and storage hardware in a secure environment.

Support for the ThinkSystem SR635 and SR655 servers has been significantly enhanced over the past few releases. This paper describes the level of support that is now available in XClarity Administrator and which releases became available after the XClarity Administrator v2.8. XClarity Administrator v3.1.1 is important in that it added greatly enhanced firmware update support, added remote console support, and added LDAP support.

Asset management

You can quickly gain a high-level or detailed-understanding of each hardware resource by accessing detailed inventory for your managed hardware. The following resources are supported.

- System
- Baseboard management controllers (BMCs)
- Processors (CPUs)
- Memory modules
- Storage
- Network interface cards (NIC)
- Peripheral Component Interconnect (PCI) cards
- Power supply units (PSUs)
- Fans (REST API support only)
- Temperature
- Output voltage (REST API support only)

To learn more, see Viewing the details of a managed server in the XClarity Administrator online documentation.

Hardware monitoring

Lenovo XClarity Administrator makes it easy to monitor system health and keep you informed of any status changes or runtime issues. From the main Dashboard, you can immediately identify the status of your overall environment and any problems that you might have. You can drill down to see a filtered list of devices in each severity category, and then drill down further to find specific issues for each device.

In addition to overall health, you can monitor the following activities.

- Audit logs
- Job logs
- Hardware/management events and alerts
- Event forwarding to email server for immediate notification and to event-consolidation software tools to aggregate, correlate, and monitor hardware events and runtime issues
- Power usage metrics
- Service data (FFDC) collection

To learn more, see Monitoring devices and activities in the XClarity Administrator online documentation.

Hardware management

You can use XClarity Administrator to manage your hardware.

- Power on, off and restart (Virtually reseating a server is not supported.)
- Mount and unmount virtual media
- Remote control using HTML5 KVM console (Requires XClarity Administrator v3.1.1 and later and management controller firmware v2.94 or later.)
- Chassis indicator LED

Configuration management

You can rapidly provision and pre-provision multiple systems using configuration patterns, which contain a single set of defined configuration settings. Predefined UEFI settings can help jumpstart optimal configuration patterns for specific workload environments.

Using XClarity Administrator, you can configure the following settings.

- BIOS settings
    - Boot order
    - Boot once
    - Secure boot
    - Set BIOS password
    - Reset BIOS to default settings

To learn more, see Configuring servers in the XClarity Administrator online documentation.

Firmware compliance and updates

You can reduce the manual effort required to track and comply with user-specified firmware levels throughout the device lifecycle using XClarity Administrator's firmware-updates management feature. Firmware management is simplified by assigning firmware-compliance policies to managed devices. XClarity Administrator monitors changes to the inventory for those devices and flags any devices that are out of compliance.

When a device is out of compliance, you can use XClarity Administrator to apply and activate firmware updates for all components in that device from a repository of firmware updates that you manage.

You can use XClarity Administrator to update the following components.

- Baseboard management controllers (BMCs)
  - Requires XClarity Administrator v2.8.0 and later and management controller firmware version AMBT10M or later.
  - Only immediate activation is supported.
- UEFI
  - Requires XClarity Administrator v2.8.0 and later and management controller firmware version AMBT10M or later.
  - Only immediate activation is supported.
- I/O adapters
  - Supported using only the bundled-update process.
  - Requires XClarity Administrator v3.1.1 and later and management controller firmware v2.94 or later.
- Lenovo XClarity Provisioning Manager (LXPM), LXPM windows drivers, and LXPM Linux drivers
  - Requires XClarity Administrator v3.2.0 and later.

To learn more, see Updating firmware in the XClarity Administrator online documentation.

Windows OS device-driver updates

Updating Windows OS device-drivers is not supported.

Operating-system deployment

Deploying operating systems is not supported.

Device authentication using an LDAP server

In XClarity Administrator v3.1.1 and later, XClarity Administrator can connect to ThinkSystem SR635 and SR655 servers using credentials in the local authentication server or external LDAP server, instead of local credentials.

Note: Baseboard management controller firmware v2.94 or later is required for this feature.

To learn more, see Managing the authentication server in the XClarity Administrator online documentation.

Remote control

In XClarity Administrator v3.1.1 and later, you can open an HTML5-based remote-control session to a managed ThinkSystem SR635 or SR655 server as if you were at a local console. You can use the remote-control session to perform actions such as logically mounting a local or network drive.

Note: Baseboard management controller firmware v2.94 or later is required for this feature.

To learn more, see Using remote control to manage ThinkSystem or ThinkAgile servers in the XClarity Administrator online documentation.

Warranty status

You can use XClarity Administrator to manage the warranties for your managed devices, including looking up current warranty information for specific devices on the Lenovo Support website and configuring XClarity Administrator to warn you when warranties are about to expire.

To learn more, see Viewing warranty information in the XClarity Administrator online documentation.

Automatic problem notification

As part of the Call Home process, XClarity Administrator can automatically collect and send diagnostic files to your Lenovo Support when certain serviceable events occur in XClarity Administrator and the managed devices. You can also manually collect diagnostic files, open a service ticket, and send diagnostic files to the Lenovo Support Center.

XClarity Administrator integrates with ServiceNow to aggregate and monitor service tickets that are opened for managed devices.

To learn more, see Setting up automatic problem notification in the XClarity Administrator online documentation.

More information

For more information about the servers, see the product guides:

- Lenovo ThinkSystem SR635 Server
- Lenovo ThinkSystem SR655 Server

Related product families

Product families related to this document are the following:

- ThinkSystem SR635 Server
- ThinkSystem SR655 Server

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