

Lenovo XClarity Administrator

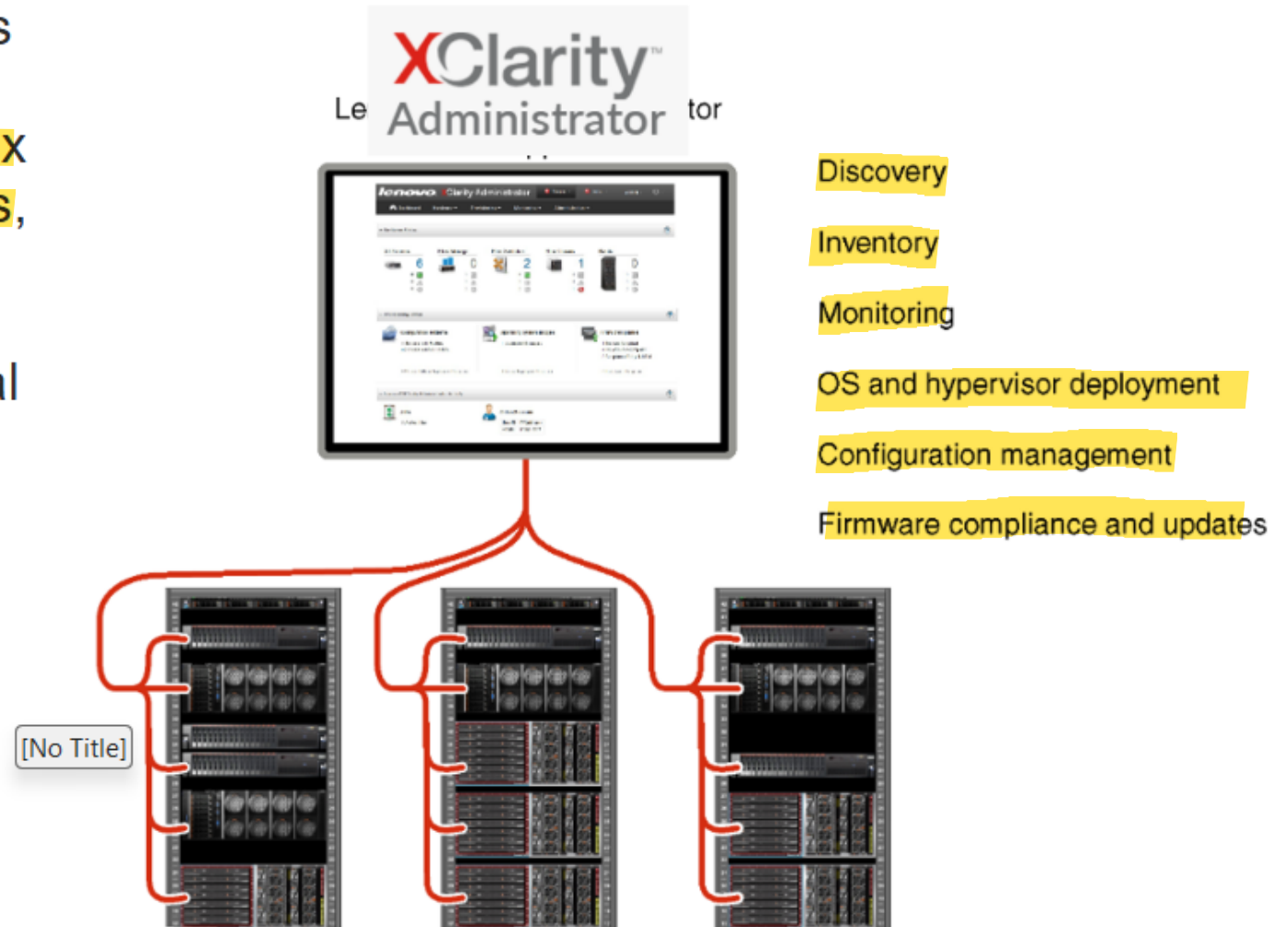
LXCA overview and how-to instructions for common tasks

Lenovo

What is Lenovo XClarity Administrator?

Lenovo XClarity Administrator (LXCA) is a comprehensive agent-less hardware management tool that supports System x servers, ThinkSystem servers, switches, and storage systems.

LXCA ~~does not~~ come bundled with ThinkSystem servers. It runs as a virtual appliance that automates discovery, inventory, tracking, monitoring, and provisioning for server, network, and storage hardware in a secure environment.



When to use LXCA

LXCA is recommended for the management of multiple systems from a single interface because it offers a wide range of functions in one tool. Functions, such as deploying operating systems and updating firmware on multiple systems, can be performed efficiently with LXCA. If a system in a data center encounters an error, the user can look at the LXCA dashboard to determine which system has flagged an error message. They can then review and download the logs, and then pass them on to support personnel for further troubleshooting.

LXCA also supports Windows driver updates.

LXCA edition comparison

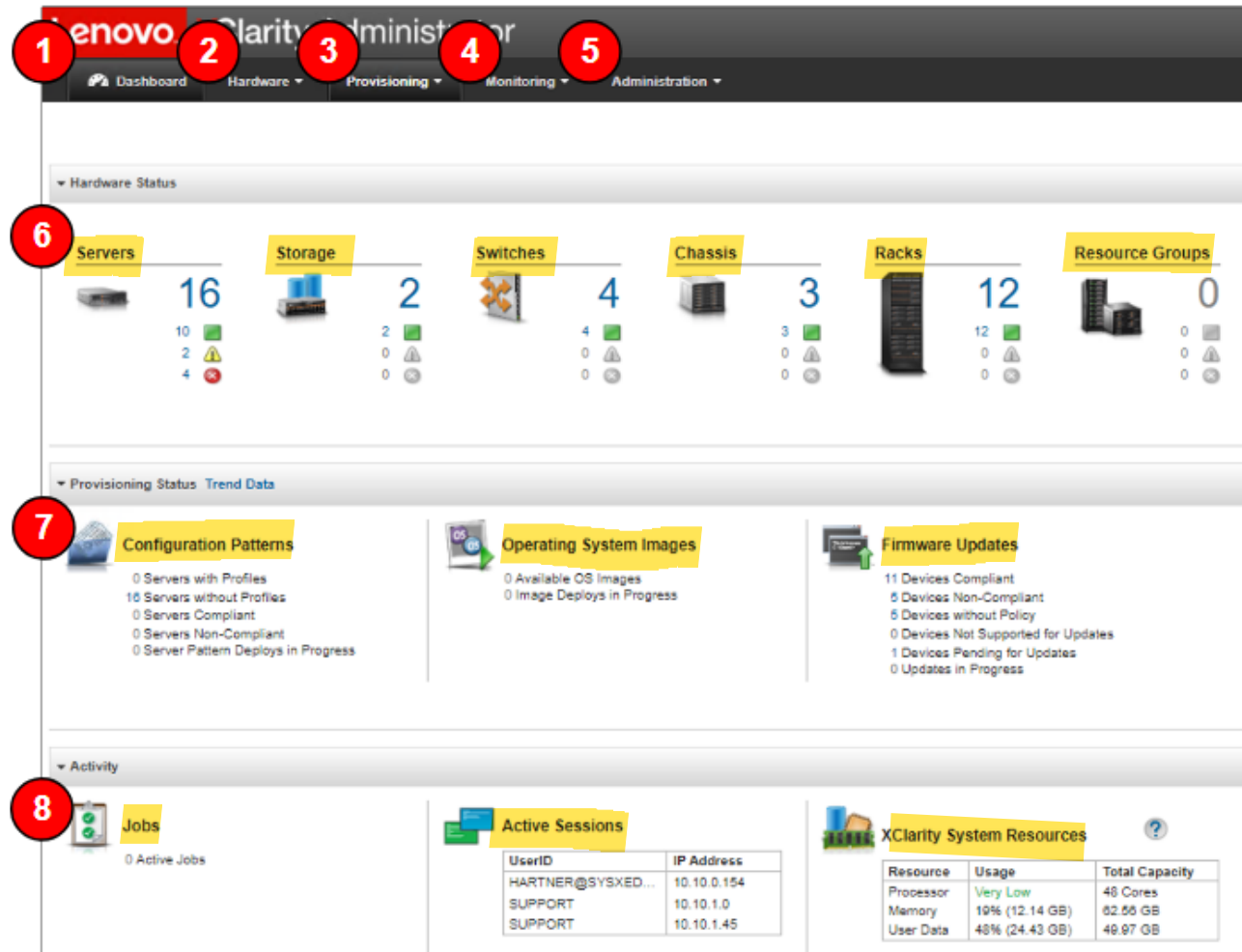
There are two LXCA editions: a free, basic edition and LXCA Pro, which requires a license upgrade.

Feature	LXCA	LXCA Pro
Licensing and support		
Free	v	
Licensed		v
Service and support		v
Key Features		
REST APIs and LXCI	v	v
Auto-discovery and asset management	v	v
Real-time monitoring, fault handling, alert notification, and Call Home	v	v
Firmware update management	v	v
Configuration patterns		v
Operating system and hypervisor installation		v

LXCA GUI quick overview

This is **LXCA Dashboard**, the LXCA homepage.

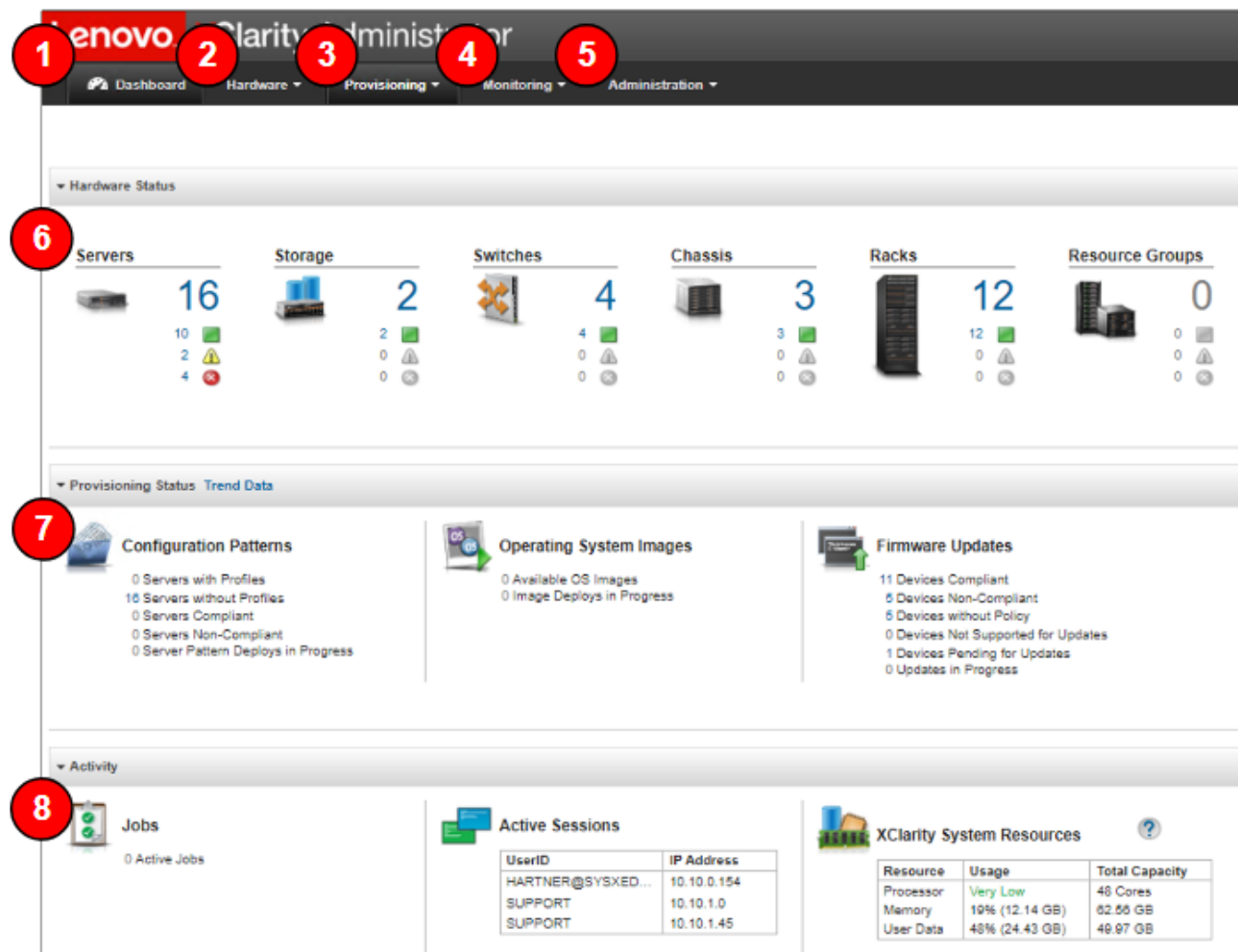
Click the icons to see descriptions of the different LXCA functions.



LXCA GUI quick overview

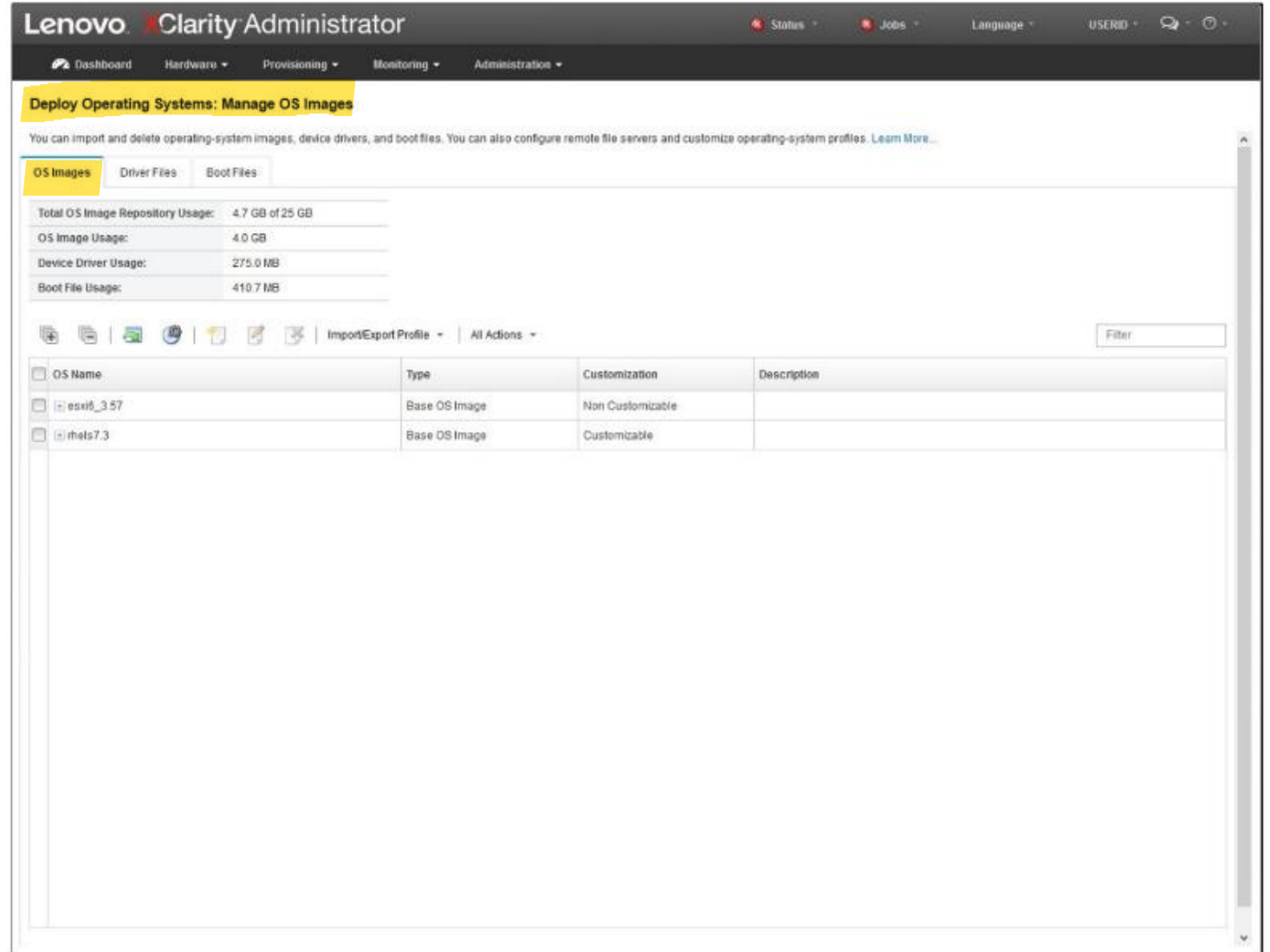
This is LXCA **Dashboard**, the LXCA homepage.

Click the icons to see descriptions of the different LXCA functions.



OS deployment

LXCA manages a repository of operating system images that allows for the concurrent deployment of operating system images to up to 28 managed servers.



The screenshot displays the Lenovo XClarity Administrator web interface. The top navigation bar includes links for Dashboard, Hardware, Provisioning, Monitoring, and Administration. The main heading is "Deploy Operating Systems: Manage OS Images". Below this, a sub-header states: "You can import and delete operating-system images, device drivers, and boot files. You can also configure remote file servers and customize operating-system profiles. [Learn More...](#)".

The interface features three tabs: "OS Images" (selected), "Driver Files", and "Boot Files". A summary section shows usage statistics:

Metric	Usage
Total OS Image Repository Usage:	4.7 GB of 25 GB
OS Image Usage:	4.0 GB
Device Driver Usage:	275.0 MB
Boot File Usage:	410.7 MB

Below the summary, there is a toolbar with icons for adding, deleting, and importing/exporting profiles. A table lists the managed OS images:

OS Name	Type	Customization	Description
☐ esxi6_3.57	Base OS Image	Non Customizable	
☐ rhel7.3	Base OS Image	Customizable	

Firmware updates

Firmware management is simplified by assigning **firmware-compliance policies** to managed devices.

When users **create and assign** a **compliance policy** to **managed devices**, LXCA monitors changes to inventory for those devices and flags any devices that are **out of compliance**.

When a device is **out of compliance**, LXCA can be used to **update** it according to the **policy**.

Lenovo XClarity Administrator

Dashboard Hardware Provisioning Monitoring Administration

Firmware Updates: Apply / Activate

To update firmware on a device, assign a compliance policy and select Perform Updates.

Update with Policy Update without Policy

Filter By: [Icons] Show: All Devices Filter

Device	Rack Name / Unit	Chassis / Bay	Power	Installed Version	Assigned Compliance Policy	Compliance Target	U
3550m5-1 10.240.61.232	4 / Unit 9		On	Compliant	DEFAULT-SystemX-Servers-2017-05-02		
IMM2-402e9d8fa6 10.240.60.23	1 / Unit 9		Off	No Compliance Policy Set	No applicable policies		
sysdedudev 10.240.61.11	1 / Unit 3		On	No Compliance Policy Set	No applicable policies		
mbackup 10.240.60.112	1 / Unit 25		On	Not Compliant	DEV-Switch-SystemX-2017-05-02		
sysdeduweb 10.240.61.15	1 / Unit 5		On	No Compliance Policy Set	No applicable policies		
H05500 10.240.61.233	4 / Unit 23		On	Not Compliant	DEFAULT-SystemX-Servers-2017-05-02		
3650m5-1 10.240.61.231	4 / Unit 7		On	Not Compliant	DEFAULT-SystemX-Servers-2017-05-02		
H03500 10.240.61.234	4 / Unit 25		On	Not Compliant	DEFAULT-SystemX-Servers-2017-05-02		
H07500 10.240.61.235	4 / Unit 27		On	Not Compliant	DEFAULT-SystemX-Servers-2017-05-02		
Scalable Complex F3D836F0C5DD1...	3 / Unit 17			Not Compliant	DEV-Switch-SystemX-2017-05-02		
Scalable Complex 9B2F2A34C91311...	3 / Unit 9			Not Compliant	DEV-Switch-SystemX-2017-05-02		
Scalable Complex BB13833077D011...	3 / Unit 1			Not Compliant	DEV-Switch-SystemX-2017-05-02		
TOR-1 10.10.1.254	Unassigned / U...		On	Not Compliant	DEFAULT-CMM-switches-storage-2017-05-02	8.4.4 / 0804 Imgy_fw_torfw_g8264-8.4.4.0_a...	
RackSwitch 10.240.61.152	Unassigned / U...		On	Not Compliant	Copy-DEFAULT-CMM-switches-storage-2017-05-02	8.4.4 / 0804 Imgy_fw_torfw_g8264-8.4.4.0_a...	
S2200-2 10.240.61.156	4 / Unit 17			Compliant	DEFAULT-CMM-switches-storage-2017-05-02	GL221R019-05 / GL221R019-05 Imgy_fw_storage_gi221r019-05...	

How to download the latest firmware

All firmware files are stored and managed in the LXCA repository. Before applying any updates, the latest update files need to be downloaded into the repository.

Work through the following procedure to download the latest firmware files into the repository.

Click each number in turn to see the procedure.



Step



How to download the latest firmware

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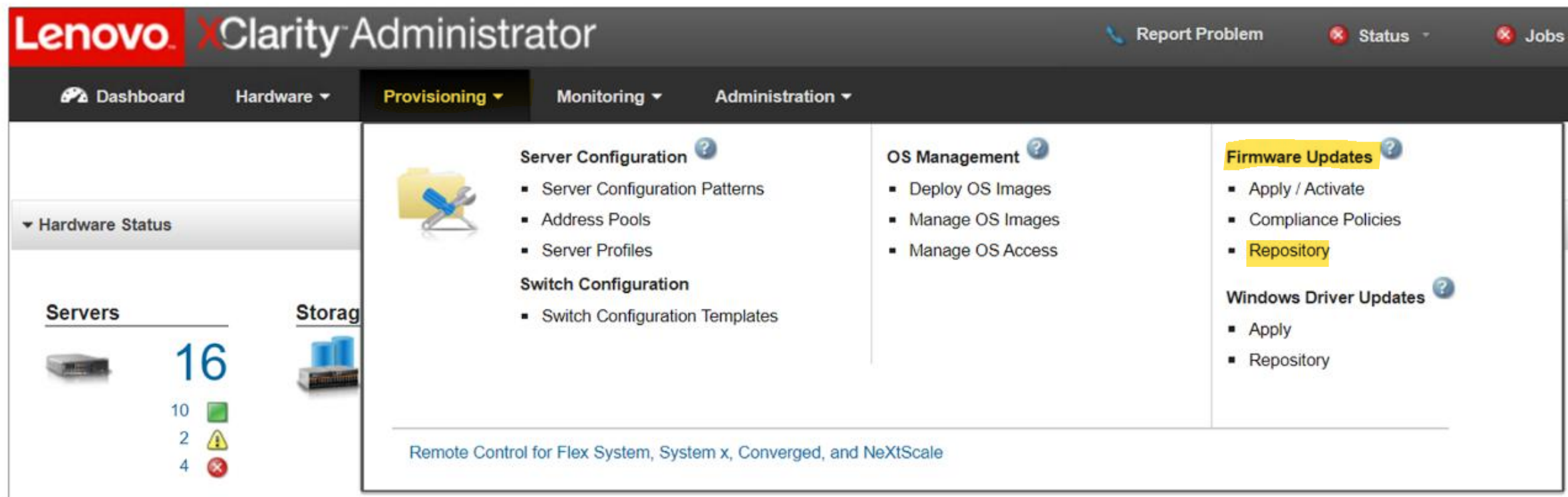


Step



How to download the latest firmware

To access the repository, click **Provisioning** in the top menu bar, and then select **Repository** from the **Firmware Updates** section.



Step



How to download the latest firmware

Select the system and firmware you want to download, and then click the  button.

Firmware Updates: Repository

Use Refresh Catalog to retrieve the latest product information. Ensure that you download update packages before adding the updates to a policy.

Repository Location: Local

Local repository usage: 178.03 MB of 50 GB

Individual Updates | UpdateXpress System Packs (UXSPs)

 **2** |  |  |  |  |  |  | All Actions | Refresh Catalog

Download Selected

Product Catalog	Machine Type	Version Information	Release Date
Lenovo ThinkSystem SD630 V2 Server	7D1K		
Lenovo ThinkSystem SR550 Server	7X04		
XCC			
☒ Lenovo XClarity Controller (XCC) Update (For AnyOS) Invgy_fw_xcc_cdi364m-5.40_anyos_noarch		5.40 / CDI364M	2020-12-01
☐ Lenovo XClarity Controller (XCC) Update Invgy_fw_xcc_cdi334w-2.50_anyos_noarch		2.50 / CDI334W	2019-04-21
☐ Lenovo XClarity Controller (XCC) Update Invgy_fw_xcc_cdi306x-1.08_anyos_noarch		1.08 / CDI306X	2017-11-21
UEFI			
UXPM			

Download Updates Packages

Downloading the firmware-update packages might take several minutes to complete.

Click "Download" to continue downloading the catalog, or click "Schedule" to download at a later time.

The following update packages will be downloaded.
- Invgy_fw_xcc_cdi364m-5.40_anyos_noarch.xml

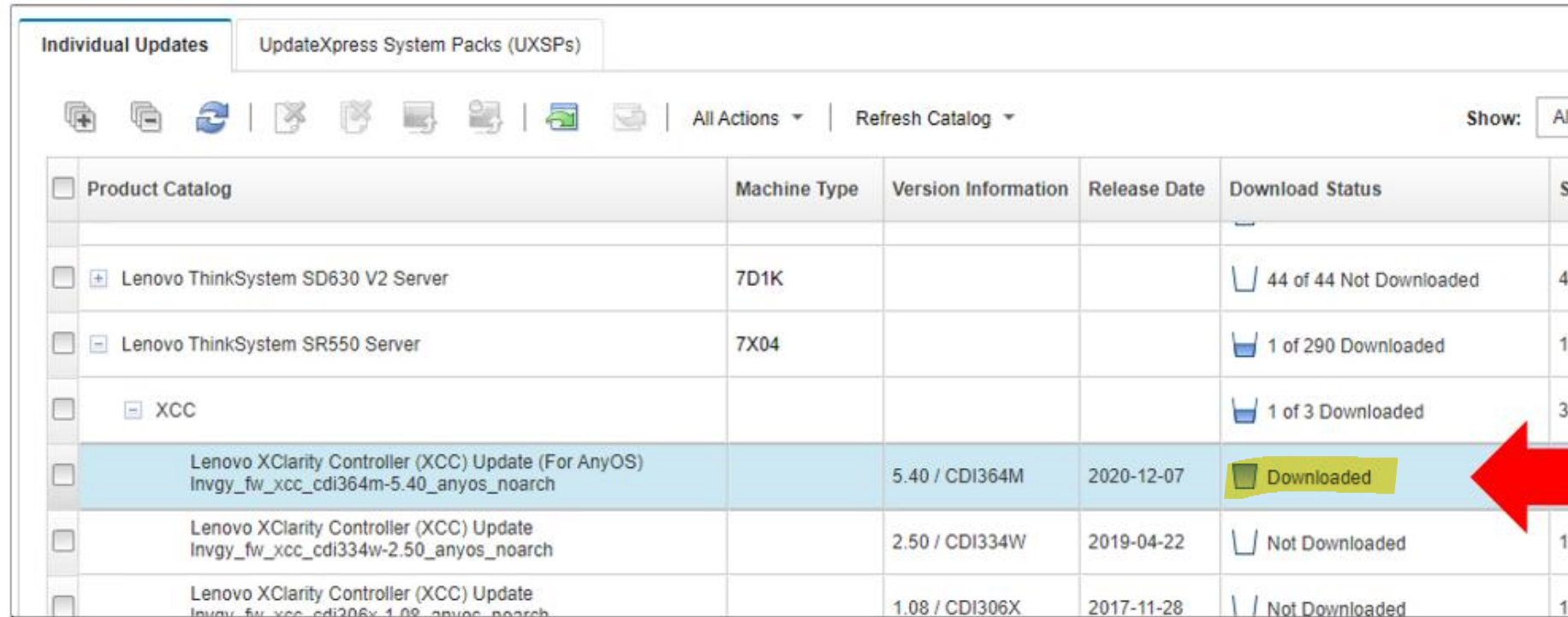
 Schedule  Download  Cancel

Step



How to download the latest firmware

When the download is complete, the firmware **Download Status** will be shown as **Downloaded**.



☐ Product Catalog	Machine Type	Version Information	Release Date	Download Status	Size
☐ + Lenovo ThinkSystem SD630 V2 Server	7D1K			 44 of 44 Not Downloaded	4.1
☐ - Lenovo ThinkSystem SR550 Server	7X04			 1 of 290 Downloaded	18
☐ - XCC				 1 of 3 Downloaded	35
☐ Lenovo XClarity Controller (XCC) Update (For AnyOS) Invgy_fw_xcc_cdi364m-5.40_anyos_noarch		5.40 / CDI364M	2020-12-07	 Downloaded	
☐ Lenovo XClarity Controller (XCC) Update Invgy_fw_xcc_cdi334w-2.50_anyos_noarch		2.50 / CDI334W	2019-04-22	 Not Downloaded	12
☐ Lenovo XClarity Controller (XCC) Update Invgy_fw_xcc_cdi306x-1.08_anyos_noarch		1.08 / CDI306X	2017-11-28	 Not Downloaded	11

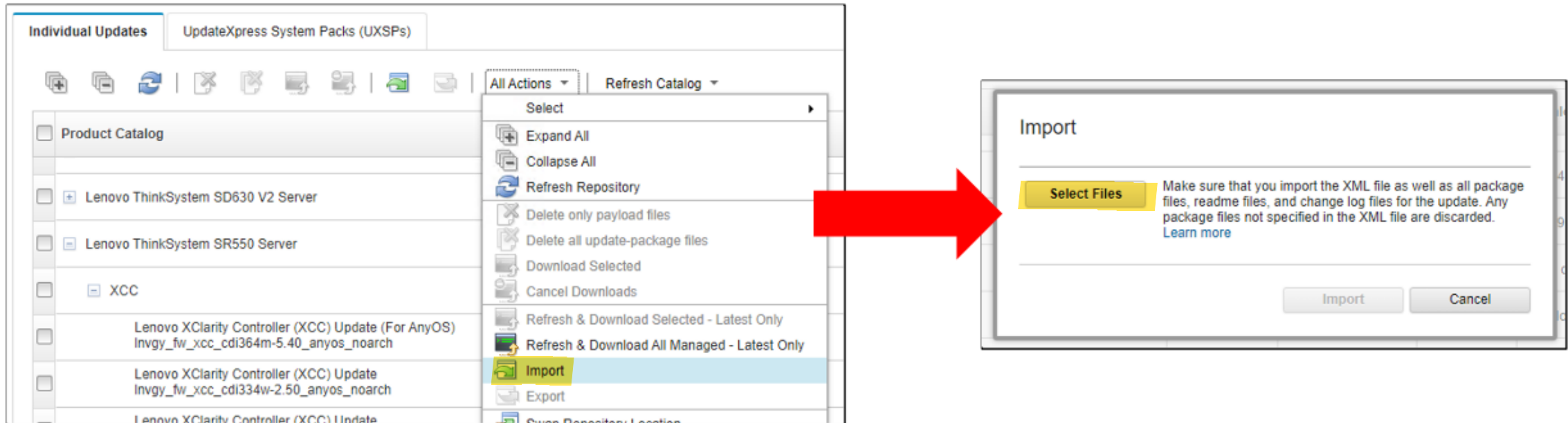
Step



How to download the latest firmware

Users can also manually import update files into the repository by selecting **Import** from the **All Actions** drop-down menu. When importing update files, make sure that the update files include *.bin, *.xml, and *.txt files or the import will not be successful.

When the import is complete, the details of the update file will be added into the repository table.



Step



How to download the latest firmware

An alternative to downloading individual update files into the repository is to apply repository packs that include a bundle of available firmware update files and refreshed firmware-compliance policies. Repository packs can be found on Lenovo Support. For each repository pack, all four files need to be downloaded and imported.

ⓘ

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[How To's](#)

[Warranty & Services](#)

[Repair Status](#)

[Parts](#)

[Contact Us](#)

Lenovo XClarity Repository Packs

[File Naming Guide](#)

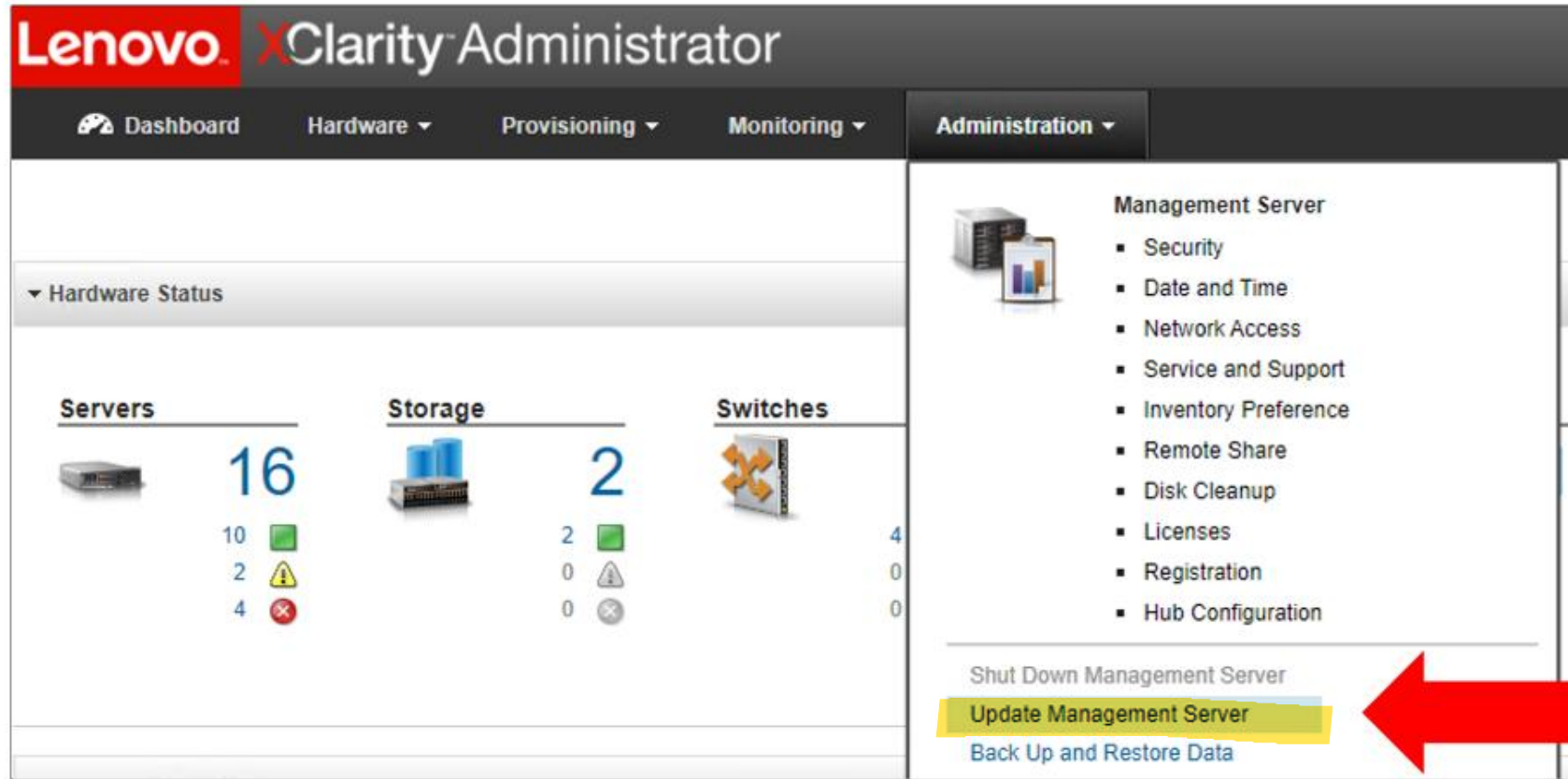
Title	Version ▼	Released ▼	Details	See Files
Lenovo XClarity Administrator cPlus ThinkServer Server Firmware Repository Pack for XClarity 3.5.0 (For AnyOS)	3.5.0 ▼	16 Feb 2022		^
Lenovo XClarity Administrator cPlus ThinkServer Server Firmware Repository Pack for XClarity 3.5.0 (For AnyOS)				
Individual Downloads		Size	Severity ⓘ	Download
Invgy_sw_lxca_cplusthinkserverrepo5-3.5.0_anyos_noarch.xml ⓘ		7.27 KB	Recommended	
Invgy_sw_lxca_cplusthinkserverrepo5-3.5.0_anyos_noarch.chg ⓘ		487 B	Recommended	
Invgy_sw_lxca_cplusthinkserverrepo5-3.5.0_anyos_noarch.txt ⓘ		1.43 KB	Recommended	
Invgy_sw_lxca_cplusthinkserverrepo5-3.5.0_anyos_noarch.tgz ⓘ		1.92 GB	Recommended	

Step



How to download the latest firmware

To import repository packs, click **Administration** in the LXCA top menu bar, and then select **Update Management Server**.

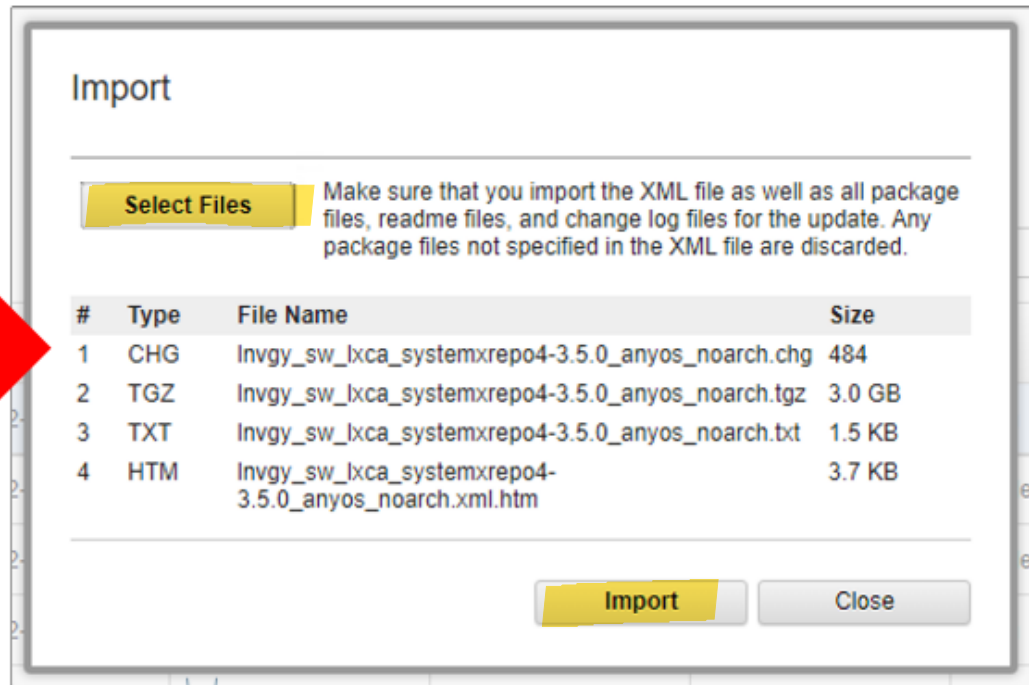
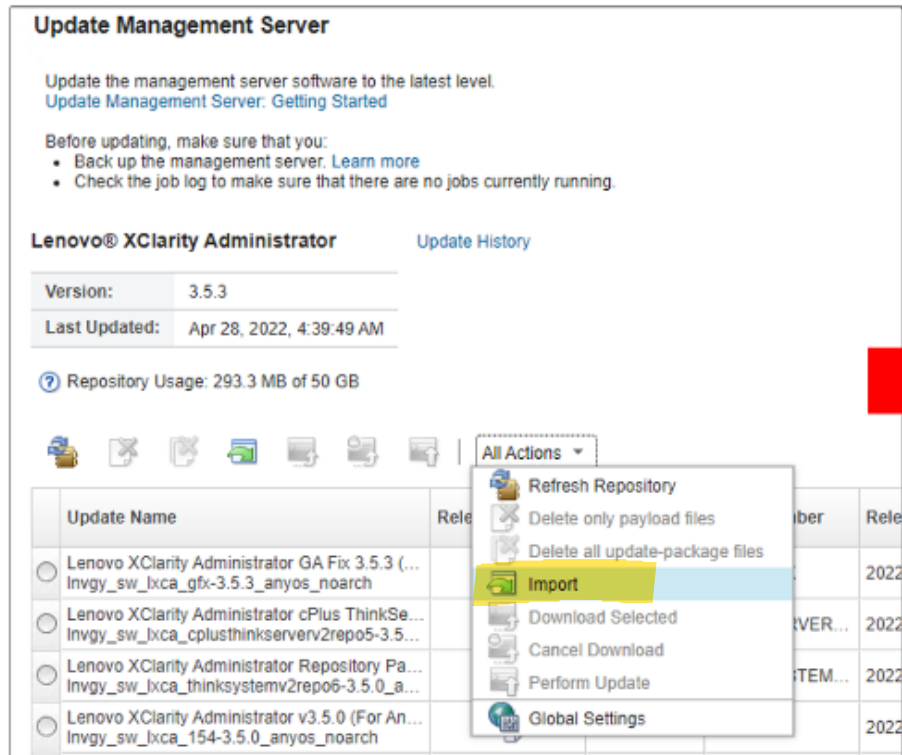


Step



How to download the latest firmware

On the **Update Management Server** page, select **Import** from the **All Actions** drop-down menu to **import all four repository pack** files in a single import action.

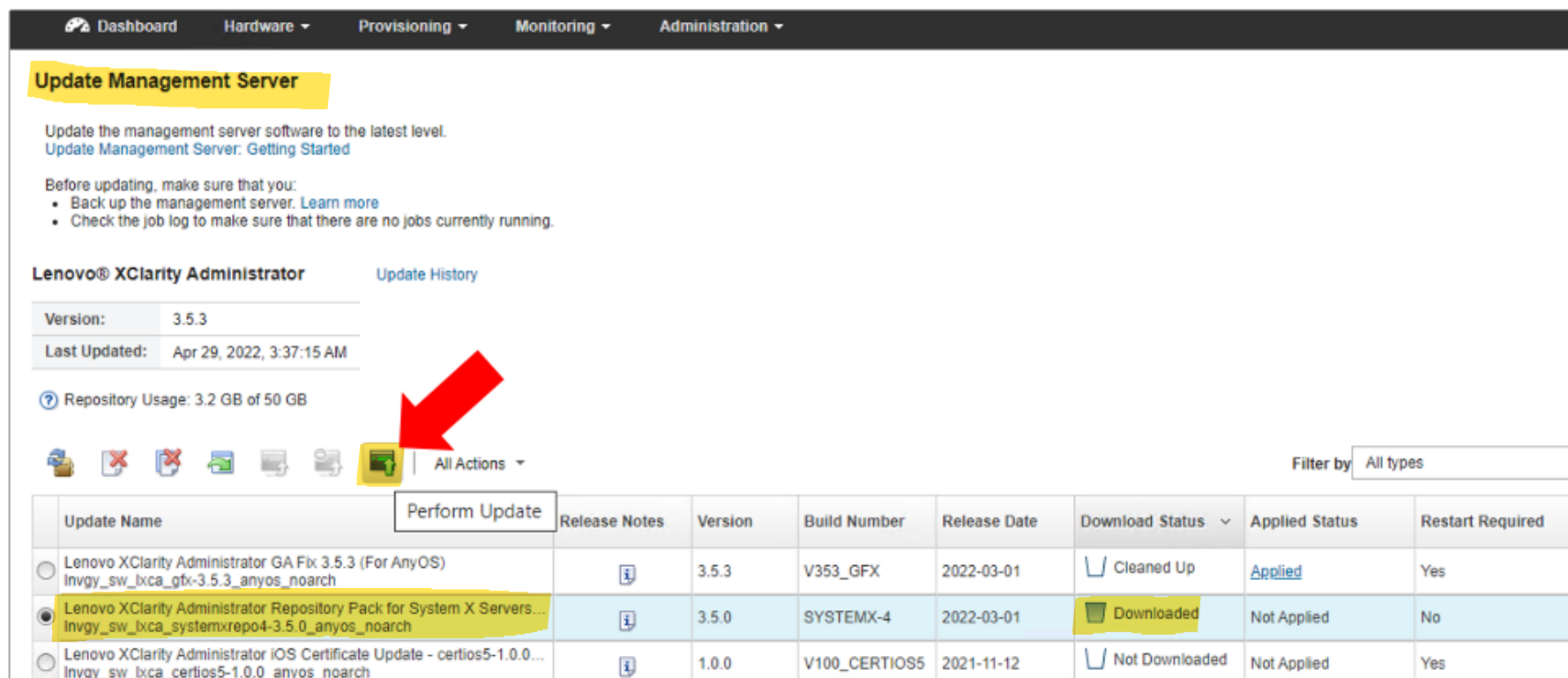


Step



How to download the latest firmware

To update the firmware, select the repository pack from the update file list, and then click the **Perform Update** button.



Update Management Server

Update the management server software to the latest level.
[Update Management Server: Getting Started](#)

Before updating, make sure that you:

- Back up the management server. [Learn more](#)
- Check the job log to make sure that there are no jobs currently running.

Lenovo® XClarity Administrator [Update History](#)

Version: 3.5.3
Last Updated: Apr 29, 2022, 3:37:15 AM

Repository Usage: 3.2 GB of 50 GB

 **Perform Update** Filter by All types

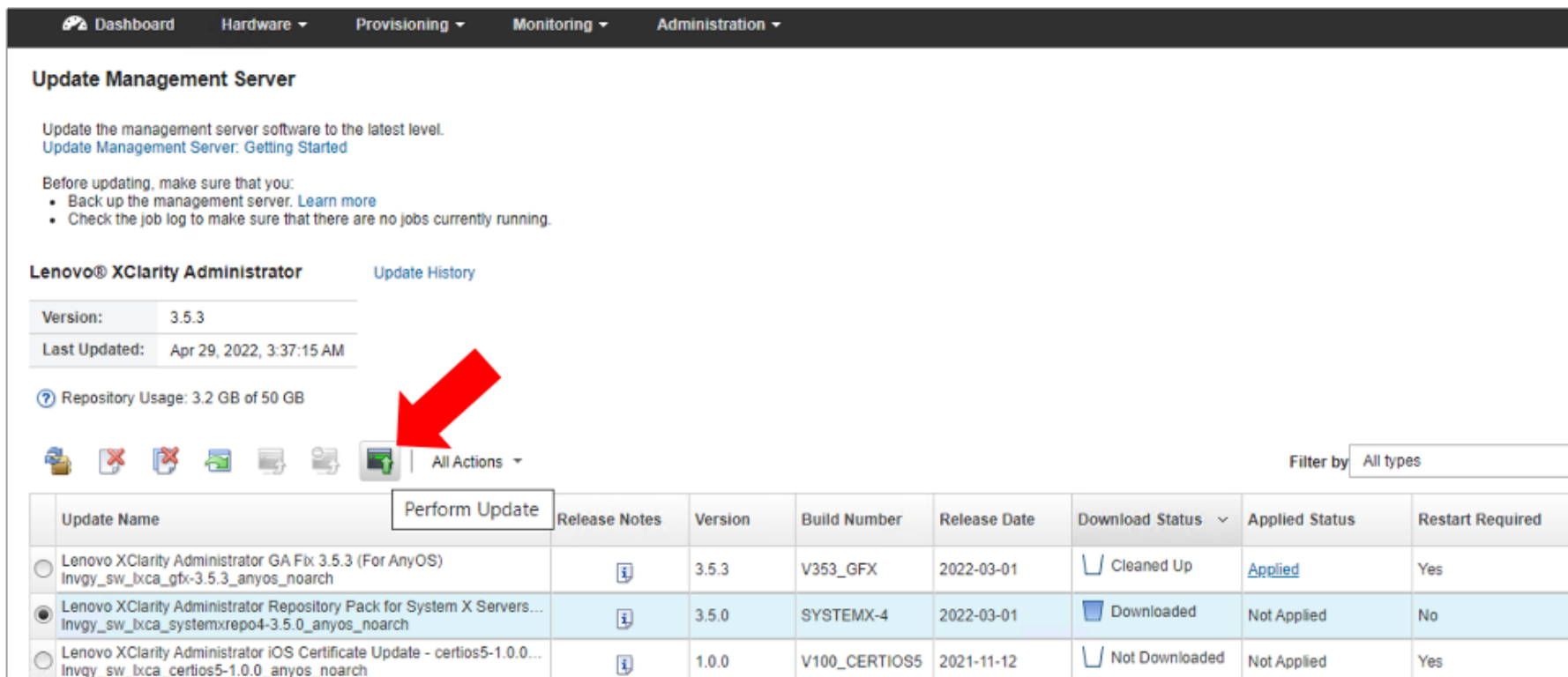
	Update Name	Release Notes	Version	Build Number	Release Date	Download Status	Applied Status	Restart Required
☐	Lenovo XClarity Administrator GA Fix 3.5.3 (For AnyOS) Invgy_sw_bxca_gfx-3.5.3_anyos_noarch		3.5.3	V353_GFX	2022-03-01	Cleaned Up	Applied	Yes
☒	Lenovo XClarity Administrator Repository Pack for System X Servers... Invgy_sw_bxca_systemrepo4-3.5.0_anyos_noarch		3.5.0	SYSTEMX-4	2022-03-01	Downloaded	Not Applied	No
☐	Lenovo XClarity Administrator iOS Certificate Update - certios5-1.0.0... Invgy_sw_bxca_certios5-1.0.0_anyos_noarch		1.0.0	V100_CERTIOS5	2021-11-12	Not Downloaded	Not Applied	Yes

Step



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Last Updated: Apr 29, 2022, 3:37:15 AM

Repository Usage: 3.2 GB of 50 GB

 **All Actions** Filter by All types

	Update Name	Release Notes	Version	Build Number	Release Date	Download Status	Applied Status	Restart Required
☐	Lenovo XClarity Administrator GA Fix 3.5.3 (For AnyOS) Invgy_sw_bxca_gfx-3.5.3_anyos_noarch		3.5.3	V353_GFX	2022-03-01	Cleaned Up	Applied	Yes
☒	Lenovo XClarity Administrator Repository Pack for System X Servers... Invgy_sw_bxca_systemrepo4-3.5.0_anyos_noarch		3.5.0	SYSTEMX-4	2022-03-01	Downloaded	Not Applied	No
☐	Lenovo XClarity Administrator iOS Certificate Update - certios5-1.0.0... Invgy_sw_bxca_certios5-1.0.0_anyos_noarch		1.0.0	V100_CERTIOS5	2021-11-12	Not Downloaded	Not Applied	Yes

Step



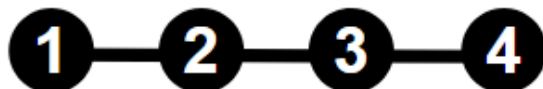
How to apply firmware

After the firmware files have been downloaded into the repository, the user should work through the following procedure to apply the update.

Click each number in turn to see the procedure.



Step



How to apply firmware

On the **Firmware Updates: Apply/Activate** page, select the system or system firmware that needs to be updated, and then click the **Perform Updates** button.

Firmware Updates: Apply / Activate

? To update firmware on a device, assign a compliance policy and select Perform Updates.

Update with Policy | Update without Policy

Perform Updates

All Actions Filter By Show: All Devices

Device	Groups	Rack Name / Unit	Chassis / Bay	Power	Installed Version
10.10.0.66		3 / Unit 33		On	No Compliance Policy Set
HX7500 10.10.3.12		4 / Unit 27		On	Pending Activation
s2200-1 10.10.0.11		4 / Unit 17			No Compliance Policy Set
☒ Chassis3 fd01:1:1:1:6:50		2 / Unit 21	Chassis 3 / Bay 1	On	2.8.0 / 1AON40A

Step



How to apply firmware

In the **Update Summary** window, the user must specify an **Update Rule** and an **Activation Rule**. The table shows a summary of the items that will be updated. To start the update process, click **Perform Update**.

Update Summary
Select your Update Rule and review your updates. Then click Perform Update.

Note: The update job will run in the background and might take several minutes to complete. Updates are performed as a job. You can go to the [Jobs](#) page to view the status of the job as it progresses.

* Update Rule: Continue on error ?

* Activation Rule: Immediate activation ?

☐ Force update ?

☒ Install prerequisite firmware ?

+ - All Actions

Device	Rack Name / Unit	Chassis / Bay	Installed Version	Downloaded Later Versions
HX3500 10.10.3.11	4 / Unit 25			

Schedule

Perform Update Close

Step



How to apply firmware

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* Update Rule: Continue on error ⓘ

* Activation Rule: Immediate activation ⓘ

☐ Force update ⓘ

☒ Install prerequisite firmware ⓘ

  | All Actions ▾

Device	Rack Name / Unit	Chassis / Bay	Installed Version	Downloaded Later Versions
 HX3500 10.10.3.11	4 / Unit 25			

 Schedule Perform Update Close

Step



User management

LXCA provides a centralized authentication server to create and manage user accounts and to manage and authenticate user credentials. The authentication server is created automatically when you start the management server for the first time. The user accounts that are created for LXCA are also used to log in to managed chassis and servers.

LXCA supports three types of authentication servers:

- **Local authentication server** – By default, LXCA is configured to use the local authentication server that resides on the management node.
- **External LDAP server** – At present, only Microsoft Active Directory is supported. This server must reside on an outboard Microsoft Windows server that is connected to the management network. When an external LDAP server is used, the local authentication server will be disabled.
- **External SAML 2.0 identity provider** – At present, only Microsoft Active Directory Federation Services (AD FS) is supported. In addition to entering a username and password, multi-factor authentication can be set up to enable additional security. This authentication includes a PIN code, smart card, and client certificate.

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

Click [HERE](#) to see a User Management screenshot.

XCC single sign-on through LXCA

XCC supports single sign-on through LXCA. If a server is managed by LXCA, LXCA will automatically enable the XCC single sign-on feature. When users select the server → **All Actions** → **Launch** → **Management Controller Web interface**, they will be able to directly access XCC and will not have to enter the XCC username and password.

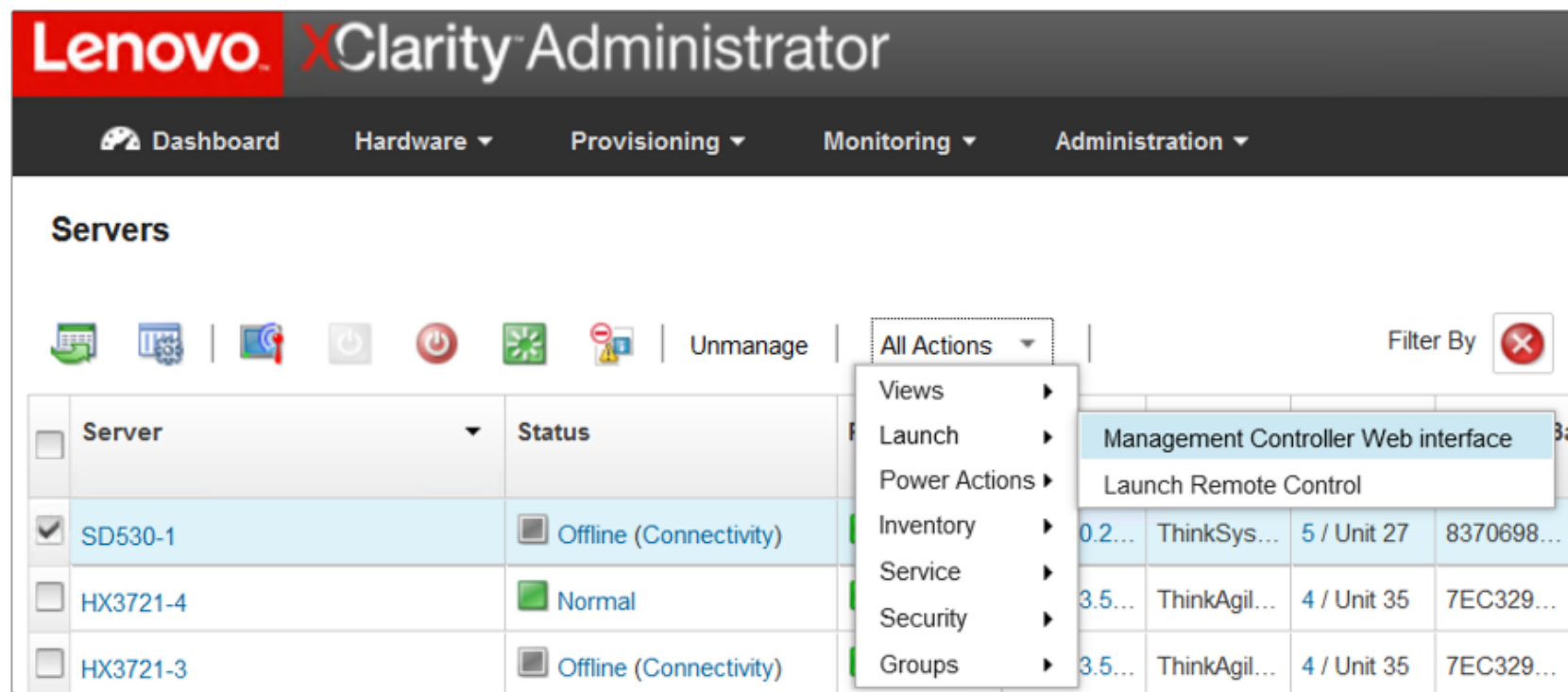
The screenshot shows the Lenovo XClarity Administrator web interface. The top navigation bar includes 'Dashboard', 'Hardware', 'Provisioning', 'Monitoring', and 'Administration'. The main section is titled 'Servers' and contains a table of server information. A dropdown menu is open for the 'All Actions' column of the first server, 'SD530-1', which is currently 'Offline (Connectivity)'. The menu options are 'Views', 'Launch', 'Power Actions', 'Inventory', 'Service', 'Security', and 'Groups'. The 'Launch' option is highlighted, and a sub-menu is visible showing 'Management Controller Web interface' and 'Launch Remote Control'. The 'Management Controller Web interface' option is highlighted in yellow.

Server	Status
☒ SD530-1	Offline (Connectivity)
☐ HX3721-4	Normal
☐ HX3721-3	Offline (Connectivity)

Note: Single sign-on is supported for all ThinkSystem and ThinkAgile servers except the ThinkSystem SR635 and SR655.

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The screenshot shows the Lenovo XClarity Administrator interface. The top navigation bar includes 'Dashboard', 'Hardware', 'Provisioning', 'Monitoring', and 'Administration'. The 'Servers' section is active, displaying a table of servers. The 'All Actions' menu is open, showing options like 'Views', 'Launch', 'Power Actions', 'Inventory', 'Service', 'Security', and 'Groups'. The 'Launch' option is selected, and a sub-menu is visible with 'Management Controller Web interface' and 'Launch Remote Control'.

Server	Status
☒ SD530-1	Offline (Connectivity)
☐ HX3721-4	Normal
☐ HX3721-3	Offline (Connectivity)

Note: Single sign-on is supported for all ThinkSystem and ThinkAgile servers except the ThinkSystem SR635 and SR655.

How to identify errors in LXCA

Alerts

Alerts indicate hardware or management conditions that need investigation and user action.

All Actions | Excluded alerts influence health status for

Show:

All Alert Sources

all devices. Disabled All Dates

☐	Severity	Serviceability	Date and Time	Source	Alert
☐	Critical	User	Nov 22, 2021, 12:21:42 PM	HX3721-1	Sensor PSU2 IN Failure has transitioned to critical from a less severe state.
☐	Critical	User	Apr 3, 2022, 6:02:43 PM	HX3721-2	Sensor PSU1 IN Failure has transitioned to critical from a less severe state.
☐	Critical	User	Oct 25, 2021, 1:38:15 PM	HX3721-4	Sensor PSU2 IN Failure has transitioned to critical from a less severe state.

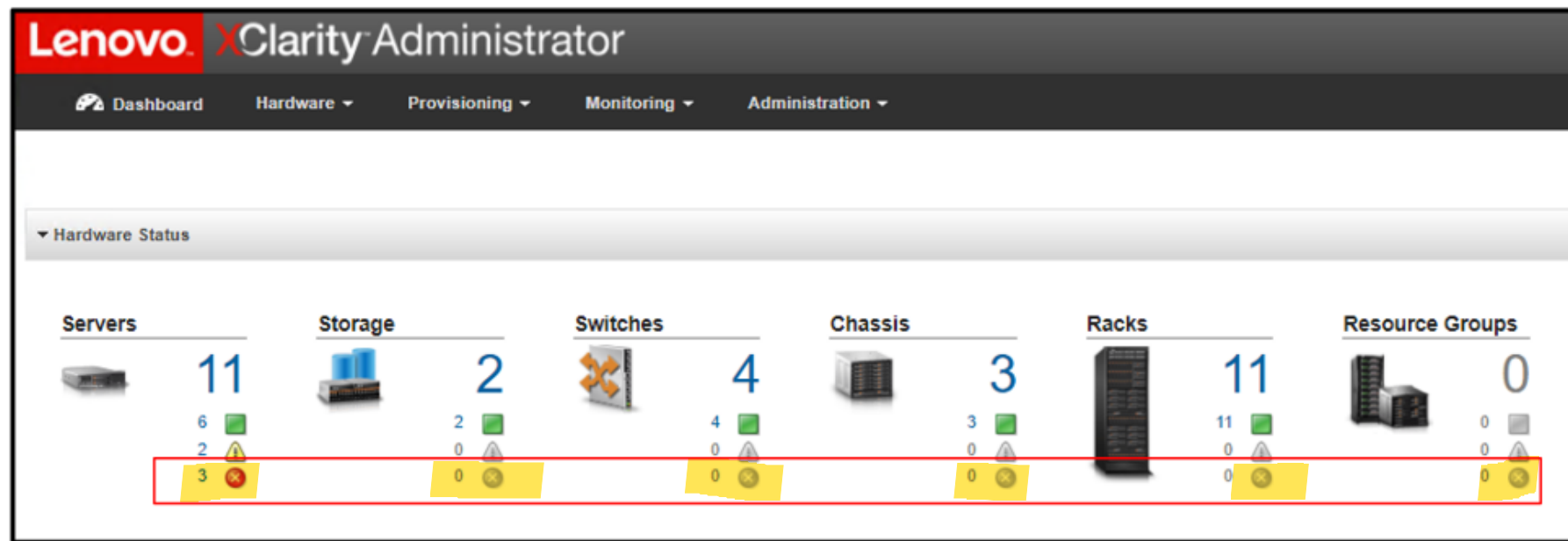
Click each number in turn to see the procedure.

Step



How to identify errors in LXCA

Error messages are accessible as soon as the user logs in to LXCA. The **Hardware Status** section of the **Dashboard** page contains a summary of the hardware monitored by LXCA. The hardware is grouped according to type, and in each group, LXCA provides a total number of event messages, units operating normally, warning messages, and critical messages. To see more detailed information about critical messages, click the number next to the  icon.



Step 1 — 2 — 3 — 4



How to identify errors in LXCA

After clicking the icon, a table showing the systems with critical messages will be displayed. To see more information about the critical error, click the **Critical** status.

The user will be directed to a dedicated system page with more detailed information about the critical message. Move the mouse over the error message to see more information.

The screenshot displays the Lenovo XClarity Administrator interface. The top navigation bar includes 'Dashboard', 'Hardware', 'Provisioning', 'Monitoring', and 'Administration'. The main content area is divided into two panels. The left panel, titled 'Servers', shows a table of servers with columns for 'Server', 'Status', 'Power', and 'IP Address'. The 'Status' column for all listed servers (HX3721-2, HX3721-3, HX3721-1, and HX3721-4) is 'Critical', highlighted with a red box. The right panel, titled 'Servers>HX3721-2 Details - Alerts', shows a detailed view of the selected server. It includes a 'General' tab and a 'Summary' section. The 'Alerts' section displays a table of alerts, with one alert highlighted: 'Critical' severity, 'Serviceability' status, 'User' as the user, and the message 'Sensor PSU1 IN Failure has transitioned to critical from a less severe state.'.

Server	Status	Power	IP Address
HX3721-2	Critical	On	10.10.3
HX3721-3	Critical	On	10.10.3
HX3721-1	Critical	On	10.10.3
HX3721-4	Critical	On	10.10.3

Severity	Serviceability	Date and Time	Alert
Critical	User	Apr 3, 2022, 6:02:43 PM	Sensor PSU1 IN Failure has transitioned to critical from a less severe state.

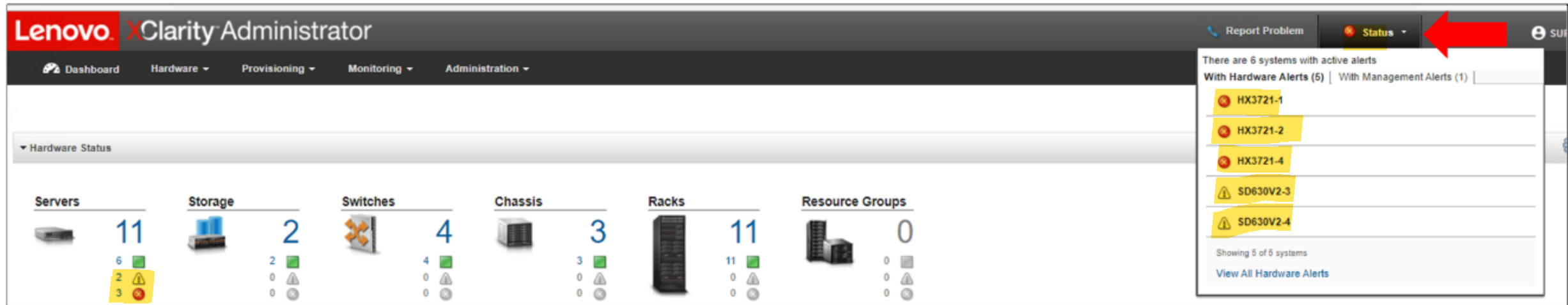
Step



How to identify errors in LXCA

Error messages can also be quickly accessed from the top menu bar on any LXCA page. Click the **Status** drop-down list to see warning or critical error messages. Move the mouse over any of the items in the list to see more information about the message.

Click **All Hardware Alerts** to go to the **Alerts** page, where all the alert messages and their descriptions are displayed. Click an alert description to see more information.



The screenshot shows the Lenovo XClarity Administrator interface. The top navigation bar includes 'Report Problem' and a 'Status' dropdown menu, which is highlighted with a red arrow. Below the navigation bar, the 'Hardware Status' section displays various components: Servers (11), Storage (2), Switches (4), Chassis (3), Racks (11), and Resource Groups (0). Each component has a status indicator (green for OK, yellow for warning, red for critical). A dropdown menu is open from the 'Status' button, showing a list of active alerts: HX3721-1, HX3721-2, HX3721-4, SD630V2-3, and SD630V2-4. The menu also indicates 'There are 6 systems with active alerts' and 'With Hardware Alerts (5) | With Management Alerts (1)'. A 'View All Hardware Alerts' link is at the bottom of the dropdown.

Step



How to identify errors in LXCA

Users can also click **Monitoring** in the top menu and then select **Alerts** to access alert messages. This will take the user to the same **Alerts** page shown in step 2.

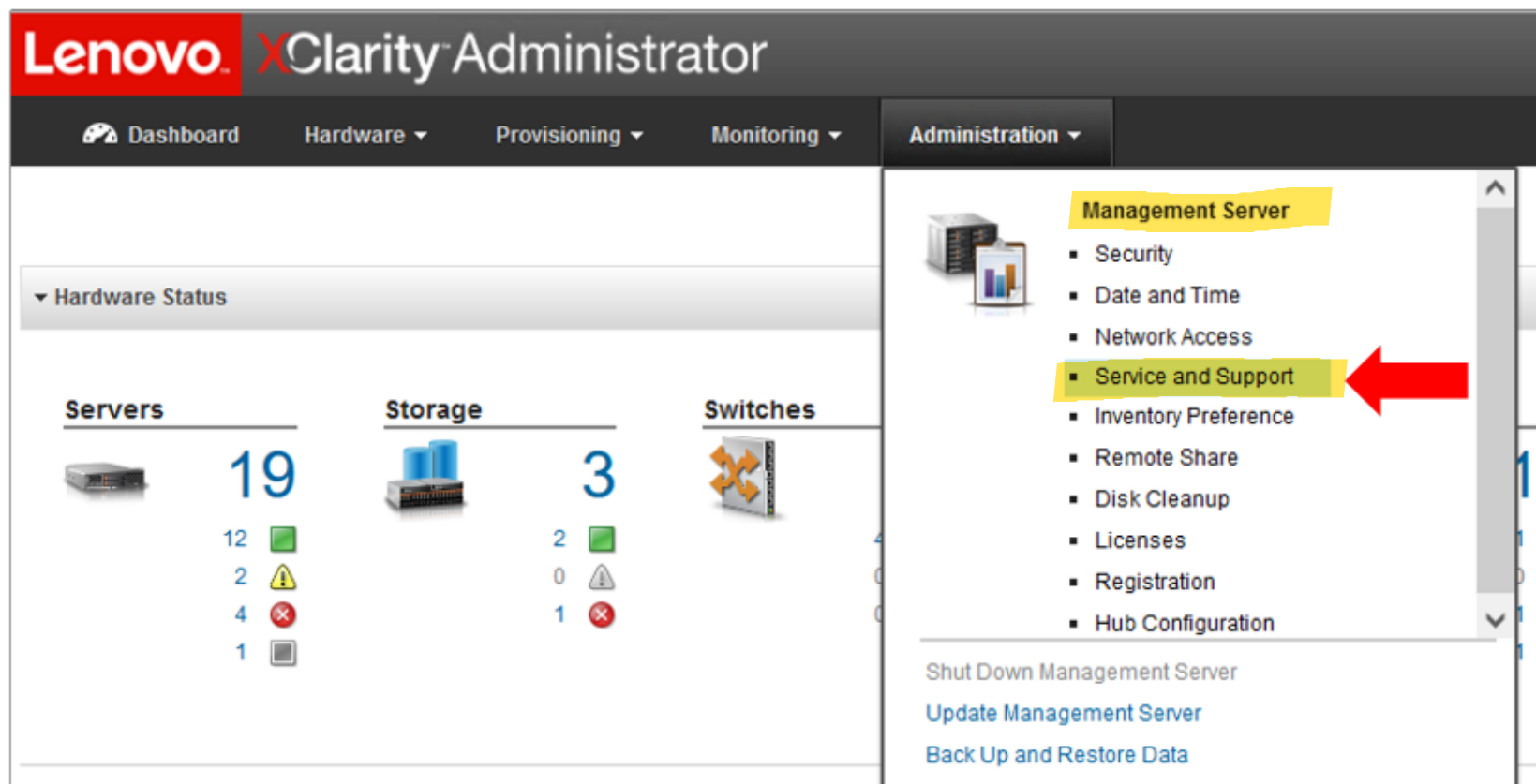


Step



Service and support – Collecting service data

Select **Administration** → **Service and Support**.

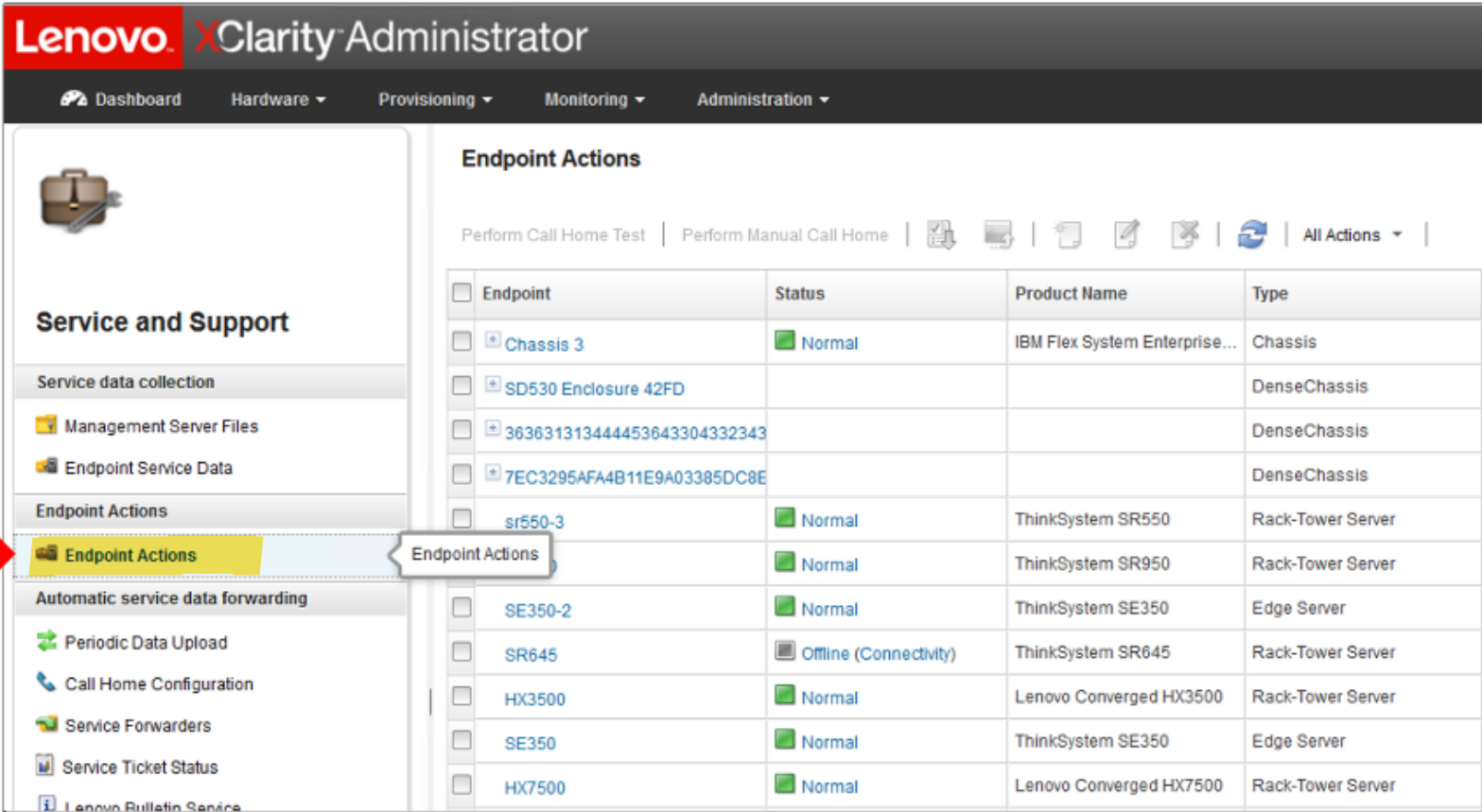


Step



Service and support – Collecting service data

Select **Endpoint Actions**.



The screenshot shows the Lenovo XClarity Administrator web interface. The left sidebar contains the 'Service and Support' section, where 'Endpoint Actions' is highlighted with a red arrow. The main content area displays a table of endpoints under the 'Endpoint Actions' heading. The table has columns for Endpoint, Status, Product Name, and Type. A tooltip labeled 'Endpoint Actions' is visible over the highlighted row.

Endpoint	Status	Product Name	Type
Chassis 3	Normal	IBM Flex System Enterprise...	Chassis
SD530 Enclosure 42FD			DenseChassis
363631313444453643304332343			DenseChassis
7EC3295AFA4B11E9A03385DC8E			DenseChassis
sr550-3	Normal	ThinkSystem SR550	Rack-Tower Server
sr550-3	Normal	ThinkSystem SR950	Rack-Tower Server
SE350-2	Normal	ThinkSystem SE350	Edge Server
SR645	Offline (Connectivity)	ThinkSystem SR645	Rack-Tower Server
HX3500	Normal	Lenovo Converged HX3500	Rack-Tower Server
SE350	Normal	ThinkSystem SE350	Edge Server
HX7500	Normal	Lenovo Converged HX7500	Rack-Tower Server

Step



Service and support – Collecting service data

Select one or more managed servers, and then select **Collect Service Data** from the **All Actions** drop-down menu.

The screenshot shows the Lenovo XClarity Administrator interface. On the left, the 'Service and Support' section is expanded, showing 'Service data collection' and 'Endpoint Actions'. The 'Endpoint Actions' table is highlighted with a red circle labeled '1'. The table has columns: Endpoint, Status, Product Name, and Type. The row for 'sr550-3' is selected. The 'All Actions' dropdown menu is open, showing various actions. The 'Collect Service Data' option is highlighted with a red circle labeled '2' and a red arrow pointing to it.

Endpoint	Status	Product Name	Type
☐ Chassis 3	Normal	IBM Flex System Enterprise...	Chassis
☐ SD530 Enclosure 42FD			Dense
☐ 363631313444453643304332343			Dense
☐ 7EC3295AFA4B11E9A03385DC8E			Dense
☒ sr550-3	Normal	ThinkSystem SR550	Rack
☐ SR950	Normal	ThinkSystem SR950	Rack
☐ SE350-2	Normal	ThinkSystem SE350	Edge
☐ SR645	Offline (Connectivity)	ThinkSystem SR645	Rack-Tower Server

All Actions dropdown menu options:

- Collect Service Data
- Lenovo Upload Selected
- Create Contact Profile
- Edit Contact Profile
- Delete Contact Profile
- Refresh
- Customize Columns
- Maintenance
- Perform Call Home Test
- Perform Manual Call Home
- Enable Call Home on all supported endpoints
- Disable Call Home on all supported endpoints

Step



Service and support – Collecting service data

Click **Collect Service Data** to collect the data immediately.

The screenshot shows the Lenovo XClarity Administrator interface. On the left, the 'Service and Support' sidebar is visible, with 'Endpoint Actions' selected. The main area displays a table of endpoints under the 'Endpoint Actions' header. The table has columns for Endpoint, Status, Product Name, Type, and Groups. The endpoint 'sr550-3' is highlighted in yellow and has a checkmark in the 'Endpoint' column. A modal dialog titled 'Collect Service Data' is open over the table, with a red arrow pointing to the 'Collect Service Data' button. The dialog also contains a 'Schedule' button and a 'Cancel' button.

Endpoint	Status	Product Name	Type	Groups
Chassis 3	Normal	IBM Flex System Enterprise...	Chassis	
SD530 Enclosure 42FD			DenseChassis	
363631313444453643304332343			DenseChassis	
7EC3295AFA4B11E9A03385DC8E			DenseChassis	
sr550-3	Normal	ThinkSystem SR550	Rack-Tower Server	Casa Ce
SR950				Casa Ce
SE350-2				Casa Ce
SR645				
HX3500				
SE350	Normal	ThinkSystem SE350	Edge Server	
HX7500	Normal	Lenovo Converged HX7500	Rack-Tower Server	

Step



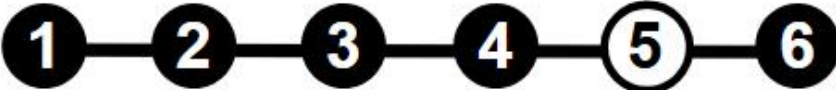
Service and support – Collecting service data

Wait for the collection process to complete.

The screenshot shows the Lenovo XClarity Administrator web interface. The left sidebar contains a 'Service and Support' section with options like 'Service data collection', 'Management Server Files', 'Endpoint Service Data', 'Endpoint Actions', and 'Automatic service data forwarding'. The main area displays 'Endpoint Actions' with a table of endpoints. A modal dialog is open, titled 'Manual collect of Service Data from device(s)', showing a progress bar at 3% and a list of tasks: 'Manual collect of Service Data from device(s)' (3.00%), 'Collecting Service Data from sr550-3' (7.00%), and 'Archiving collected service data files.' (Pending). The dialog includes 'Show Details' and 'Close' buttons.

Endpoint	Status	Product Name	Type	Groups
☐ Chassis 3	Normal	IBM Flex System Enterprise...	Chassis	
☐ SD530 Endlosure 42FD			DenseChassis	
☐ 363831313444453643304332343			DenseChassis	
☐ 7EC3				
☒ sr550				
☐ SR95				
☐ SE35				
☐ SR54				
☐ HX35				
☐ SE35				
☐ HX75				
☐ HX5500	Normal	Lenovo Converged HX5500	Rack-Tower Server	

Step



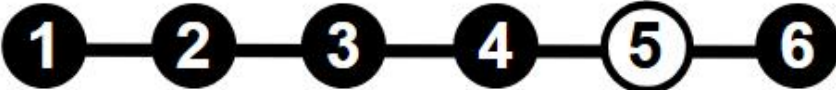
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363831313444453643304332343			DenseChassis	
7EC3				
sr550-3				
SR950				
SE350				
SR650				
HX350				
SE350				
HX750				
HX5500	Normal	Lenovo Converged HX5500	Rack-Tower Server	

Step



Service and support – Collecting service data

After collecting the service data, go to the **Endpoint Service Data** page to download or upload the service data files.

Lenovo XClarity Administrator

Dashboard Hardware Provisioning Monitoring Administration

Service and Support

- Service data collection
 - Management Server Files
 - Endpoint Service Data**
- Endpoint Actions
 - Endpoint Actions
- Automatic service data forwarding

Endpoint Service Data

Use this tab to download diagnostic files collected from the endpoints.

Download Selected Service Files

Endpoint ID	System	Component
7X04CT01WW_J1000A5W_xcc_...	Manual Collect	sr550-3

Step



Task automation using scripts

LXCA can be integrated into external, higher-level management and automation platforms through open REST application programming interfaces (APIs). Using the REST APIs, LXCA can integrate with an existing management infrastructure.

The PowerShell toolkit provides a library of cmdlets to automate provisioning and resource management from a Microsoft PowerShell session. The Python toolkit provides a Python-based library of commands and APIs to automate provisioning and resource management from an OpenStack environment such as Ansible or Puppet. Both of these toolkits provide an interface to LXCA REST APIs to automate different functions such as:

- Logging in to LXCA
- Managing and unmanaging chassis, servers, storage devices, and top-of-rack switches (devices)
- Collecting and checking inventory data for devices and components
- Deploying an operating system image to one or more servers
- Configuring servers through the use of Configuration Patterns
- Applying firmware updates to devices

Task automation using scripts

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- Configuring servers through the use of Configuration Patterns
- Applying firmware updates to devices

LXCA helpful links

- LXCA quick demo:
<http://www.lenovoxclarity.com/demo/index.html>
- LXCA support resource:
<https://www.lenovo.com/tw/zh/data-center/software/systems-management/xclarity/?orgRef=https%253A%252F%252Fwww.google.com%252F#tab-ww-xclarity-main-tab-5>
- LXCA documentation:
https://sysmgt.lenovofiles.com/help/topic/com.lenovo.lxca.doc/aug_product_page.html
- LXCA video tours:
<https://datacentersupport.lenovo.com/lu/en/solutions/ht513652>