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Overview

Enterprise IT Managers live in a world where they are forced to react to their users' issues after their productivity has already been impacted. This interaction is inherently negative and stressful for all involved.

Lenovo Device Intelligence (LDI) changes this dynamic by allowing IT Admins to be proactive in their ability to support their users through the use of artificial intelligence (AI) and machine learning (ML) techniques that can monitor on-device trends and forecast a hardware or OS/software issue that may occur.

As an IT Manager or Analyst, you now have additional tools that enable you to be more proactive in resolving device health issues before they negatively impact your employees' productivity.

Setup & Configuration

Organization Setup



Hello Bilbo Baggins!

Welcome to Lenovo Device Intelligence! You have been recently added to your organization's portal.

As an IT Admin, you now have additional tools in your toolkit that enable you to be more proactive in resolving device health issues before they negatively impact employee experience.

Follow these 3 easy steps to get you started with Lenovo Device Intelligence:

 Make sure you have created a Lenovo ID, which is required to access the Lenovo Device Intelligence (LDI) portal. Click <u>here</u> to create one.
 Visit the <u>LDI Support Website</u> and download the documents under "How to Get Started" to become more familiar with using LDI.
 Bookmark your organizations URL to access it anytime, <u>uds.lenovo.com/TheShire/portal</u>



When your organization's portal is created, a single administrative account will be created. The IT Owner specified to Lenovo at the time of sale will receive a Lenovo Device Intelligence email indicating that he or she has been granted access to your organization. Clicking on the link will take you to the Sign on page where you can get logged in to LDI as an Organization Administrator.

With this administrative account, you can: configure the portal, invite users, and add devices.

Manage Organization

Note:	Some o	f these	settings	mav no	t annear	if vour	organization	is in d	a Trial	program.
1000		jinese	scungs	may no	i uppcui	ij your	or gunization	15 111	i II mi j	pi 05i um.

Tab	Function
Profile	 Manage the profile for your organization Logo Organization name Country Address
Licenses	 View the licenses assigned to your organization, their quantities and usage. A link is availabl assignment on a per-device basis. When a device is unlicensed (due to assignment or expiration), you can expect the following: Data from the device will not be collected or processed Previous data for the device will be preserved The device will be excluded from reports and intelligence
Authentication	View the authentication type for users of the solution in your organization.

Settings for your organization can be accessed by clicking on your user icon in the top ribbon "Organization Account" option.

The following options are available:

- Update Organization Name
- Update Organization Country
- Update Organization Website
- Update Organization Address
- Update Organization Profile Image

PROFILE LICENSES	AUTHENTICATION			
	INFORMATION			
Ering and Erico file here or effektor repains	Display Name	Country		
6 <mark>11</mark>	through the franchis	United States	•	
Oreanization Domain	CONTACTS			
Co Sauranon Provini				
Domain URL	Website (optional)			
	Organization Address			
			B	

User Preferences

Preferences for your user account in the portal can be accessed by clicking on your User Icon in the top ribbon > "Preferences" option.

Preferences page allows you to manage portal language, email frequency, and view Terms & Conditions with Privacy Policy.

Preference	Description
Language	The language that the portal UI is displayed in.
Email	Enable or disable scheduled report notifications.
Frequency	Daily Email Summary - Start your day with an update of a daily snapshot of all the current and potential issues in your fleet.

Settings	Terms & Conditions
Language Endlish Email Frequency Divid Geal Summary Review a delay snagahot of the Issues from the previous day.	Constraints as a Service Cloud Agreement The Agreement during the great attems regulating the access and use of Lanoxo Software delivered by ou as 3 Sad Soldom accessable via the Cloud, Lanoxo Software as Service Cloud Constraints The Agreement during the great attems regulating the access and use of Lanoxo Software delivered by ou as 3 Sad Soldom accessable via the Cloud, Lanoxo Software as Service Cloud Constraints Cloud Constraints Cloud Constraints Cloud Constraints Cloud Cloud Constraints Cloud Constraints Cloud Constraints Cloud Constraints Cloud Cloud Constraints Cloud Clou
	Priviacy Policy Laroour receptions that privacy had great Importance to individuals everywhere - our castomers, website visitors, product users

Portal Preferences page

User Management

Manage your User Profile

Profile info can be accessed by clicking on your user icon in the top ribbon > "My Profile" option.

The following options are available:

- Update your First Name
- Update your Last Name
- Update your Profile Image
- Enable/disable Multi-Factor Authentication.
- Delete your account

My Profile			INFORMATION	SECURITY
Drag and Drop file here or click to replace	INFORMATION First Name Danylo Role	0	Last Name Svynkinn Status	
Why we need your photo 👔				
	CONTACT Email dsvynkin@lenovo.com	0		
	🗑 Delete your account			
			Cancel	Update

User Role Types

When adding users to your portal, there are three role types to assign: 1) Organization Admin, 2) IT Admin, and 3) Lenovo Device Intelligence (LDI) Support. Below is a table contrasting the functionality of all of these roles.

The LDI Support role can be assigned to a Lenovo Support agent if you would like assistance with an issue.

	Role				
Function	Organization Admin	IT Admin	LDI Support		
Dashboard	[7] We provide the independence of the inde	[^{2]} To plane and in the particular [^{2]}	(7) The performance with the department.		
View Devices	[2] We show an a function of the implement.	P to pole and in defined.	[7] The performance of the dependence of the		
Manage Devices	2 ² We photo and the depleted	T to poles and in defined.	[7] The performance is a set of the distribution.		
View Users	[2] We photo and a background.	T to poles and in defined.	[7] The performance is a set of the distribution.		
Manage Users	[7] We share an " We default.	T to poles and in defined.	[7] We polar and the destroyed.		
View Users Groups	[2 ⁷ To printer our * Minghand.	T to point and the defined.	T the polar car's in depend.		
Manage Users Groups	[2 ⁷ To printer our "Windprint.	The police last in defined.	T the polar card in defined.		

View Devices Groups	[7] We share such the definition.	F The actions can be a set of a set of the s	μ ² του poline and the deduced.
Manage Devices Groups	[7] * We close service dependent.	T to pose out a dense.	[² το μείου μετ'η διάρους.
Create Support Tickets	[2] We set the UP in Advance.	T in point on X remot.	[7] The point contribution of the distance.

Lenovo ID

Lenovo ID is the secure and trusted mechanism providing authentication & identity management for Lenovo Device Intelligence. It offers single sign on as well as integration with other Lenovo solutions. Lenovo ID accounts can be freely created at passport.lenovo.com. It is not necessary to create the Lenovo ID accounts before, users can be invited to join and create an account.

View Organization Users

Users can be managed in your portal by accessing Users Manager \rightarrow Users. A table depicts (for each user) their name, role, email, status, group.

≡	Lenovo Device Intelligence	Home / Users				Brian Hamm Organization Admin	
Ψ	Dashboard	Users +					Refresh
۰۸	Issues	🗊 Delete 🗁 Group 🛛 More 🕶				Search	Q
· 🖵	Device Manager	□ + NAME	ROLE	EMAIL	STATUS	GROUP	
- 8	Users Manager	Admin Admin	Organization Admin	ul.testing.7@naea1.uds-dev.lenovo.com	Active		
		Andre Rossouw	Organization Admin	arossouw@lenovo.com	Invited		
	User Groups	Caroline Stahl	Organization Admin	cwall1@lenovo.com	Active		
Ċ!	Support Ticketing	Steve Leeds	Organization Admin	jsleeds@lenovo.com	Active		

On the Users page, you can:

- Invite users
- Delete users
- Group users
- Update users
- Perform Bulk updates for users
- Export a list of users to CSV
- View User status

Invite User(s)

Users can be added to your portal by accessing Users Manager \rightarrow Users \rightarrow + (add) button. You can invite users individually, or in bulk by uploading a CSV file containing user details for each invitee.

In order to add user individually (manually):

- 1. Click on button "+".
- 2. Input all the required info.
- 3. Click on the button "Invite".
- 4. The user will receive an email invitation with a link to sign in and/or create a Lenovo ID account using the same email address.

Invite User All fields are required except where noted	MANUAL INVITE	BULK INVITE
INFORMATION	CONTACT	
First Name	Email	
Last Name	_	
Role IT Admin		
IT Admin Lenovo Device Intelligence Support Organization Admin		
	_	
	Cancel	Invite
	Cantel	invite

In order to add user(s) in bulk:

- 1. Click on button "+".
- 2. Select "Bulk Invite" tab.
- 3. Download CSV template by clicking on "Download CSV template" button.
- 4. Populate CSV file with required info for each user First Name, Last Name, Role and Email.

Example CSV for bulk user invite

```
First Name,Last Name,Role,Email
Bill,Lumbergh,Organization Admin,wlumberg@initech.com
Peter,Gibbons,IT Admin,pgibbons@initech.com
Milton,Waddams,Lenovo Device Intelligence Support,mwaddams@initech.com
```



- 5. Drop CSV file to the modal window and click on button "Verify".
- 6. When uploading a CSV file, the file will be processed and any errors with the upload will be displayed in a feedback screen.



7. You will receive an e-mail confirmation from the portal when the upload completes.



If a user loses their invitation email, you can resend the invitation by clicking on the user in the Users Table.

Update user(s)

In order to manage user information, click on a user to open the user tray.

The following options are available for a user on the user tray:

- Update user's information and contact details (First Name, Last Name, Email, User Role);
- Upload/update a user's profile image;
- Delete a user.

-ju	User info	Activity History
	Active	
	Re-send Invitation	1
1	INFORMATION	
	First Name	Role
	Barrison .	IT Admin 👻
	Last Name	
	Mu	
	CONTACTS Email	
	State	
	USER IMAGE (OPTIONAL)	
	MULTI-FACTOR AUTHENTICATION	Cancel Save

Bulk updates

Org/Subscription Admins have the option to Export/Import users on Users list.

In order to export user(s) to the .CSV file:

- 1. Select user(s) that you want to export (don't select anything in order to export all the users).
- 2. Click on item "Export" in the "More" dropdown.

In order to edit multiple user(s):

- Update user fields in the exported users file. Make sure "Action (update/delete)" column in CSV file is filled in if changes are needed:
 "Update" should be provided next to the user that needs to be updated.
 - "Delete" should be provided next to the user that needs to be removed from the Organization
- 2. Click on item "Import" in the "More" dropdown.
- 3. Drop CSV file to the modal window and click on button "Verify".

Import Users							
Upload a CSV file with all the users you want to edit.							
Make sure "Action (update/delete)" column in CSV file is filled in if changes are in "Update" should be provided next to the user that needs to be updated. "Delete" should be provided next to the user that needs to be removed from the	needed: e Organization						
Drop CSV file here o	or o upload						
Jusers (2).csv		159 B 🚫					
	Cancel	Verify					

4. The system will validate the uploaded data and an e-mail confirmation will be triggered from the portal when the upload completes.

You can review the results of the import process via "Import Results" option.

Delete user(s)

In order to delete user(s) from your organization:

1. Select the User(s) you want to delete.

2. Click on the button "Delete" and confirm the deletion.

	novo vice Intelligence	Home / I	Users					
🖗 Das	shboard	Use	rs (Ð				
• ⚠ Issu	Jes	🗑 De	elete	🗎 Group More 🕶				
• 🖵 Dev	vice Manager		4	NAME	ROLE	EMAIL		STATUS
• Å Use	ers Manager			Admin Admin	Organization Admin	ul.testing.7@naea1.uds-dev.	lenovo.com	Active
U	Jsers			Andre Rossouw	Delete User			Invited
U	Jser Groups			Caroline Stahl				Active
រាំ្រ្ត Sup	oport Ticketing			Steve Leeds				Active
	_				Are you sure you want to delete	this user?		
					Cancel	Yes		

Assign User(s) to a User Group from the Users page

In order to assign a User to a User Group you need to:

- Add a Check next to the the User(s) which you want to assign to a User Group and click on button "Group" at the top of the page. Note: A User can be assigned to an existing group only. Please see the User Groups section for more information on how to create a group.
- 2. Select the group you want to assign the user(s) to and click on button "Assign". Note: Any users already assigned to other groups will be reassigned to the current group as a result of this action.



User Groups

Grouping users is helpful for managing a large number of users - typically by geography, department, or role. User groups can be managed in your portal by accessing Users Manager \rightarrow User Groups.

Create user group

In order to create user group:

- 1. On the User Groups page click on + ("Create group") button.
- 2. Fill in field "Group Name" in the opened window.

Grou	ip Name			
USEF	LIST (Selected 0 of 18)		Search	Q
	NAME	ROLE	EMAIL	GROUP
	1000-010	Organization Admin		
	Notice in the	IT Admin		
		Organization Admin	and the second second	
	Sectors (Sectors)	Organization Admin		
	(in Personal)	Organization Admin	description of the second	
	Trans receipters	IT Admin		

- 3. Select users you want to assign to this group (not required step).
- 4. Click on button "Assign".

Manage user group

In order to manage or update group info, click on a group to open user group tray.

The following options are available for a user on the tray:

- Update group name.
- Add new user(s) to the group.
- Delete user(s) from the group.
- Delete a group.

🗵 User Group 1			
Group Name User Group 1			
MEMBERS			
+ Add Member			
Name			
CREATED DATE 11-25-2020 01:12 AM	MODIFIED DATE 11-25-2020 01:18 A	M	
	_		

Deleting User Group(s)

To delete a User Group:

- Select the groups you want to delete.
 Click on "Delete" and confirm the deletion.

Ξ	Lenovo Device Intelligence	Home / User Groups		
Ŷ	Dashboard	User Groups 🛛 🕣		
• 🖄		Delete		Search
• 🖵	Device Manager	V + NAME	CREATED DATE	MODIFIED DATE
• ≜		Test Group	02-24-2021 02:51 PM	02-24-2021 02:51 PM
			Delete Group	
Ē.	Support Ticketing			
			Are you sure you want to delete this group?	
			Cancel Yes	

You may also delete a group from the User Group tray.

Manage Devices

Devices represent the PC devices that are in your organization and typically used by employees . A device can be a tablet, notebook, desktop, workstation, etc.

Add Devices

Adding a device requires providing details to the portal about the device (serial number, model, etc) and provisioning the device with configuration and a software agent.

NOTE: A dedicated guide exists for the device enrollment and activation process. Please refer to the accompanying *Device Setup Guide* and follow the steps in that guide.

Manage Devices

Devices in your organization's portal can be accessed via **Device Manager** \rightarrow **Devices**.

Each device in the table represents a device that was added into your portal, including devices that have not yet completed registration. The Status for each device is helpful for identifying the expected functionality for the device.

_									
Ξ	Lenovo Device Intelligence	Hom	e / Devices						Brian Hamm Organization Admin
Ŷ	Dashboard	De	evices 👴						Refresh
• 🛦	Issues	Б	Unclaim 🗁 Group	More -				Search	Q
• 📮	Device Manager		DEVICE NAME	MANUFACTURER	SERIAL NUMBER	LICENSE	LICENSE TYPE	STATUS	UPLOAD DATE
			Device0	Lenovo	5490789C-E875-4501-ASA7	Yes	LDI Device License	Unresponsive	01-27-2021 11:48 AM
	Device Groups		Device03	Lenovo	D80219DC-A466-458B-A3D	Yes	LDI Device License	Unresponsive	01-27-2021 11:50 AM
• 8	Users Manager		Device04	Lenovo	4DC7C4D8-01E1-4D74-94F	Yes	LDI Device License	Unresponsive	01-27-2021 11:52 AM
Ċ.	Support Ticketing		Device06	Lenovo	B58C9AEC-3BEF-4EE0-A842	Yes	LDI Device License	Unresponsive	01-28-2021 03:48 AM
			Device07	Lenovo	AA17B646-C5C1-4E91-A2E9	Yes	LDI Device License	Unresponsive	01-28-2021 03:49 AM
			Device08	Lenovo	EF7C9850-777C-4CA1-98DF	Yes	LDI Device License	Unresponsive	01-28-2021 03:56 AM
			Device09	Lenovo	F879F382-88BE-4329-AA47	Yes	LDI Device License	Unresponsive	01-28-2021 04:09 AM
			Device10	Lengvo	64E2D3FD-48ED-4E31-A9D	Yes	LDI Device License	Unresponsive	01-28-2021 04:27 AM

Device Status	Meaning
	The device has successfully registered with Lenovo Device Intelligence and is in communication with the Lenovo cloud.
	The device is unlicensed and therefore will be excluded from reports.
PENDING	The device is licensed (if applicable) and has not completed registration - possibly due to provisioning error. If a device remains in this state, please consult the troubleshooting portion of the Device Setup Guide.

Device Status	Meaning
Unresponsive	Devices that do not send data to the system for three days. These devices are moved from Active Status to Unresponsive Status. If the device does not have a license, it will become Unactivated.

Viewing Devices

Device Tray

From the Devices page, click on any device to open its corresponding *Device Tray*.

The Device Tray contains 2 tabs:

- Device details
- Activity History

The following options are available for a user on the Device Tray:

- View device details.
- View hardware and software details about this device.
- Delete the device.
- Raise a support ticket.
- Crashes & Unsafe Shutdowns.
- Installed Components & Versions.

×	Device de	tails	Activity History		
	Device06				
	DEVICE TYPE 20BB	MANUFACTURER Lenovo	SERIAL NUMBER B58C9AEC-3BEF-4EE0		
	LICENSED Yes	HEALTH SCORE Unavailable at this tir	me		

HARDWARE & SOFTWARE ON THIS DEVICE

0	Battery 1 No issues	HEALTH SCORE Unavailable at this time
A	Solid State Drive 3 issues	HEALTH SCORE Unavailable at this time
A	Applications Performance 1 issue	HEALTH SCORE /100
A	Crashes & Unsafe Shutdowns 1 issue	HEALTH SCORE /100
A	Installed Components & Versio BIOS, Drivers, Firmware	ons 👻
[Need help?
Dele	ete device	Raise a Lenovo Support Ticket

The following options are available on the device tray - Activity History tab:

• View the device Activity History

- Export device Activity History to CSV file.
- Delete device.
- Raise a support ticket.

Installed Components and Versions (BIOS, Drivers, Firmware)

- Current BIOS Version
- List of device drivers loaded in last 7 days including current version
- Firmware
- Operating System

Deleting or Removing a Device (also referred to as 'Unclaiming')

A device should be unclaimed if you want to remove it from your portal, especially when ownership of the device will be transferred outside of your company.

In order to unclaim one or more devices:

1. Select the devices in the devices list

2. Click on the "Unclaim" button and confirm.

After being unclaimed the device will no longer be accessible in your portal. It is recommended that you uninstall the Lenovo UDC Agent (Universal Device Client) from the device if you do not intend on using the device in the portal. For instructions on how to uninstall UDC, please refer to the **Device Setup Guide** for uninstall instructions.

Device Groups

Grouping devices is helpful for managing a large number of devices - typically by geography or department. Device groups can be managed in your portal by accessing **Device Manager** \rightarrow **Device Groups**.

Create device group

In order to create device group:

- 1. On the Device Groups page click on + ("Create device") button.
- 2. Fill in field "Group Name" in the opened window.

3. Select devices you want to assign to this group (not required step).

4. Click on button "Assign".

Manage device group

In order to manage or update group info, click on a group to open device group tray.

The following options are available for a user on the tray:

- Update group name.
- Add new device(s) to the group.
- Delete device(s) from the group.
- Delete a group.

Assigning device(s) to a Device Group from Devices page

In order to assign a device to a Device Group:

- 1. Check the device(s) you want to assign to the group and click on button "Group" at the top of the page.
- 2. Choose the group you want to assign the device(s) to and click on button "Assign".

Delete device group(s)

In order to delete group(s):

- Select the groups you want to delete.
 Click on the button "Delete" and confirm the deletion.

Note: You also can delete the group from the device group tray.

Licensing

NOTE: Device Licensing is only available for organizations that are not in Trial mode.

In order for Lenovo Device Intelligence to collect and report analytics for the devices in your fleet, it must be assigned a Lenovo Device Intelligence license.

When a device is unlicensed (due to assignment or expiration), you can expect the following:

• Data from the device will not be collected or processed.

- Previous data for the device will be preserved.
- The device will be excluded from reports and intelligence.

License Management

Licenses are managed under the "Organization Account" under the Profile menu.

Click on the "Organization account" button in the user profile dropdown and navigate to the *Licenses* tab.



• You can also access the Licensing page by clicking on the license counts on the dashboard.



• Additionally, Licensing can be accessed using the "Assign License" button on the Device Tray for an unlicensed device.



To Assign/Unassign licenses:

1. Under the Profile menu, navigate to the "Organization Account" page \rightarrow Licenses tab.

2. Click on "Assignments".



3. The system will display "Assignments" modal window with the list of licensed and unlicensed devices which you can assign/unassign by clicking on the arrow buttons.

Lenovo Device Intelligence

Dashboard

The Dashboard is the home page for Lenovo Device Intelligence and offers an overview of the devices in your organization. The Dashboard consists of a number of Cards, where each Card represents one or many insight categories. "Issues" are how items are tracked for each insight category; clicking on a metrics displayed on a chart or below a particular widget will typically navigate the user to the corresponding "Issue Report Page", which provides a device-by-device list of issues. All widgets are the same size to allow continuity with the dashboard.

Issue data is displayed for the last 24 hours by default.



LDI Dashboard - Single Date View

Facets are available at the top of the dashboard to filter by:

1. Device Groups:

2. Detected and Predicted issues:



- 3. Date/Date range filter:
 - 1. Selecting a date range filter will cause the Dashboard to refresh with the data associated with the selected date range.
 - 2. Note: The following Dashboard widgets are *not* affected by the Date Filter: Health Score, Device Counts, and Licensing (if available)


Filtering by date provides a historical view of your devices fleet in each insight category that allows you to view and analyze how the state of your devices has changed over time.

Filtering by a date range will cause some Dashboard charts to transform into a trend line in order to display issues over time.

Date/Time Refresh now corresponds to when the data was last refreshed in the organization.

Dashboard Cards

Card	Details
Current Issue Summary - single date view.	
Current Issue Summary - date range view.	The most urgent issues that need your attention by issue category that were detected on the selected date or date range. Clicking on a category will navigate you to the issue report for that respective category.

Card	Details
Device Activations Summary	 Details View usage of device activations. Applies to organizations that have paid subscriptions. "Active Devices": these are devices that have been licensed for LDI and have successfully completed the device registration process. "Pending Devices": these are devices that have been enrolled into the portal and have been assigned a license, however the registration process has not yet been completed on the device. This would primarily be due to the Agent software not having been installed on the device or incorrectly configured. Please refer to the Troubleshooting section of the <i>Device Setup Guide</i> for assistance. "Unresponsive Devices": devices that do not send data to the system for three days. These devices are moved from Active Status to Unresponsive Status and if the device does not have a license, it will become Unactivated. "Unactivated Devices" have not been licensed for LDI - this only applies if licensing is available for your organization.

Overall Health The Overall Health of the device is meant to provide you with an at-a-glance view of your fleet summarized into a single number. It is the average of individual health scores across active devices in your fleet. Both Current and Potential issues affecting a device factor into its health, with the score more heavily affected by Current issues. Overall Health divided by issue categories Clicking on the health score number will provide a detailed breakdown on how much the health score is affected by the following issue categories: It is BSOD Applications Impacting Performance Batteries HDD/SSD Windows Device Manager	Card	Details
	Card Overall Health Overall Health Overall Health divided by issue categories	Details The Overall Health of the device is meant to provide you with an at-a-glance view of your fleet summarized into a single number. It is the average of individual health scores across active devices in your fleet. Both Current and Potential issues affecting a device factor into its health, with the score more heavily affected by Current issues. Clicking on the health score number will provide a detailed breakdown of how much the health score is affected by the following issue categories: • BSOD • Applications Impacting Performance • Batteries • HDD/SSD • Windows Device Manager
		 BSOD Applications Impacting Performance Batteries HDD/SSD Windows Device Manager

System Crashes (Blue Screen of Death) - single date view.	
System Crashes (Blue Screen of Death) - date range view.	 Historical crashes detected across the fleet as well as predicted crashes modeled on the presence of out-of-date driver(s): Single date view chart displays the number of issues detected during the 30 days before the selected date. Date range view chart displays the number of issues detected during the selected date range. Chart tooltips display the number of top 5 and total number of crashes detected on the selected date on the chart. Clicking on the counts or totals in this widget will navigate you to the detailed BSOD issue reports.

Card	Details
Applications Impacting Performance - single date view. Applications Impacting Performance - date range view.	 Apps and Processes that have been flagged by Lenovo Device Intelligence's on-device AI model as being potential causers of high CPU consumption: Single date view chart displays total number of impacted devices, top 5 applications that impact your device fleet on the selected date the most and the number of impacted devices by them. Date range view chart displays the same information as on single date view, but for each date in the selected range. Clicking on any of the counts or totals in this widget will navigate you to the Issue Report.

Dashboard Enhancements

Expanded Dashboard Widgets

Dashboard widgets can be exported. To Export a widget:

- Click on the ellipsis found on the upper right-hand corner of the widget
- Choose Export Graph



• User will have the option to choose from JPG or PNG file types

Maximize Widgets

Dashboard widgets that contain information/data may be expanded. To expand a widget:

- Click on the ellipsis found on the upper right-hand corner of the widget
- Choose Maximize
 - If Maximize is not an available option, there is no data in that particular widget



- The widget is maximized with user having the option to mouse over data or select specific items on the widget
- Returning to the dashboard will require the user to click the Close button

System Crashes (BSODs)

System crashes for Windows devices are commonly referred to as "**Blue Screen of Death**". These occurrences can cause loss of time, effort, and possibly permanent loss of work not to mention end-user frustration. Lenovo Device Intelligence uses artificial intelligence to analyze device hardware, drivers, and OS events to highlight crashes that are currently occurring, and are likely to occur in the future.

Name	Details
Detected Crashes	This report can provide details about crashes that have recently occurred on devices within your organization.
Frequently Crashing	This report can identify trending crashes on devices within your organization. This can help you to tackle the most troublesome crashes that may be impacting the device experience.
Predicted Crashes	This report uses AI to identify crash trends and predict which devices are likely to encounter similar crashes. Responding to predictions in this report enables you to fix problems before they occur.

BSOD Crashes Report Page - Detected Crashes Tab

Date filtering provides a historical view of the issues that affected devices fleet before.

BSOD Issues can be filtered by various columns (see Issue Reports Filtering).

BSOD Issues can be searched and sorted by various columns (see Searching Functionality).

Export functionality allows exporting selected BSOD Crashes Report tab to .csv file (see <u>Issue</u> <u>Report Exporting</u>).

When clicking on a particular issue, the system displays the Issue Tray, which provides details about the finding as well as suggests remediations that may resolve the issue (see <u>Issue Tray</u>).

Application Performance Insights

A process can be a driver, UI application, or background service, and an average PC may have 100 - 200 processes running at a time. Each process consumes from a limited resource pool of memory, disk I/O, network, and most importantly, CPU. Lenovo Device Intelligence uses ondevice AI to identify processes that are exhibiting abnormal resource usage that may be impacting the performance of the whole PC and may be an early indicator for further issues that could be observed in your fleet.

For each finding, the Device Tray will provide details about the finding as well as suggest remediations that may resolve the issue.

Applications Impacting Performance report

Date filtering provides a historical view of the issues that affected devices fleet before.

Applications Impacting Performance can be filtered by various columns (see <u>Issue Reports</u> <u>Filtering</u>).

Applications Impacting Performance can be searched and sorted by various columns (see <u>Searching Functionality</u>).

Export functionality allows exporting selected Applications Impacting Performance Report tab to CSV file (see <u>Issue Tray</u>).

When clicking on a particular issue, the system displays the Issue Tray, which provides details about the finding as well as suggests remediations that may resolve the issue (see <u>Issue Tray</u>).

Battery Insights

Batteries enable device users to work while on a plane, in a meeting, or on the couch. A computer user with a poor performing battery will experience a diminished work experience, and may be limited in regards to how, where, and when they work. All batteries naturally degrade over time, but some batteries may degrade faster than others due to user behavior, environment conditions, or manufacturer quality defects.

For each finding, the Device Tray will provide details about the finding as well as suggest remediations that may resolve the issue.

Name	Details
Low Performance	This report can identify devices with batteries that are under performing in regard to their expected charge. Devices marked as "poor" condition may cause an unpleasant device user
	experience as they will not enable the user to remain unplugged for long.
Charging Deviations	AI-based Anomaly detection that detects devices who are experiencing charging behavior that is irregular when compared to normal charging trends. A change in the charging characteristics may be indicative of a new or recent change on the device that could induce irregular power consumption.
Warranty Expired	This report can identify devices where the battery is likely not covered by manufacturer warranty, only using time as a factor. This feature is currently applicable to Lenovo devices only.

Name	Details
	This report can identify devices where the battery is approaching problems likely not covered by manufacturer warranty, only using time as a factor.
Warranty Expired Soon	You can use this feature to identify devices that are both poor performing and eligible for a replacement before the warranty expires.
	This feature is currently applicable to Lenovo devices only.

Battery Issues Report Page - Low Performance Tab

Date filtering provides a historical view of the issues that affected devices fleet before.

Battery Issues can be filtered by various columns (see Issue Reports Filtering).

Battery Issues can be searched and sorted by various columns (see Searching Functionality).

Export functionality allows exporting selected Battery Issue Report tab to CSV file (see <u>Issue</u> <u>Report Exporting</u>).

When clicking on a particular issue, the system displays the Issue Tray, which provides details about the finding as well as suggests remediations that may resolve the issue (see <u>Issue Tray</u>).

Storage Drive Insights

Storage reports aggregate data from storage drives (HDD, SSD, NvME) within your organization and highlights concerning issues using factors such as drive capacity, S.M.A.R.T monitoring, temperature, and firmware. A problematic storage device may result in frequent crashing, loss of time, or permanent loss of work.

For each finding, the Device Tray will provide details about the finding as well as suggest remediations that may resolve the issue.

Name	Details
All	This report can be used to identify devices with storage drives that are currently problematic.
Detected	You can use this report to identify user devices that may need a drive replacement or cleanup
High Risk	This report uses AI to identify storage failure trends and predict which devices may soon have a high-risk issue. Responding to predictions in this report enables you to fix problems before they occur.
Medium	This report uses AI to identify storage failure trends and predict which devices may soon have a medium-risk issue.
Risk	Responding to predictions in this report enables you to fix problems before they occur.



Storage Drive Issues Report Page - All Detected Tab

Date filtering provides a historical view of the issues that affected devices fleet before.

Storage Drive Issues can be filtered by various columns (see Issue Reports Filtering).

Storage Drive Issues can be searched and sorted by various columns (see <u>Searching</u> <u>Functionality</u>).

Export functionality allows exporting selected Storage Drive Issue Report tab to CSV file (see <u>Issue Report Exporting</u>).

When clicking on a particular issue, the system displays the Issue Tray, which provides details about the finding as well as suggests remediation that may resolve the issue (see <u>Issue Tray</u>).

Windows Device Manager Insights

A PC is comprised of many smaller devices, such as storage, battery, mouse, display, network adapter, etc. Each of these devices may depend on one or more device drivers which can be viewed in Windows Device Manager. A problematic device may lead to instability on the PC in addition to loss of productivity and work. Factors that are included in this feature are devices that report physical errors, problem codes, events, and crashes.

For each finding, the Device Tray will provide details about the finding as well as suggest remediations that may resolve the issue.

WDM Issues Report Page

Date filtering provides a historical view of the issues that affected devices fleet before.

WDM Issues can be filtered by various columns (see Issue Reports Filtering).

WDM Issues can be searched and sorted by various columns (see Searching Functionality).

Export functionality allows exporting selected WDM Issue Report tab to CSV file (see <u>Issue</u> <u>Report Exporting</u>).

When clicking on a particular issue, the system displays the Issue Tray, which provides details about the finding as well as suggests remediations that may resolve the issue (see <u>Issue Tray</u>).

Issue Reports Filtering

Issue reports filtering functionality allows you to filter the list of issues by filter criteria (defined columns by which the list can be filtered - unique for each issue report and its tab) displayed in the "Filter data" modal window.

Filtering functionality is available on each of the following Issue Report pages:

- BSOD Crashes
- Application Impacting Performance
- Battery Issues
- Storage Drive Issues
- Device Errors

Filter Data modal window

Filters are displayed near the top of the page with an "X" to the right of the filter. User can remove filters as needed by clicking on the "X":

There are 2 types of filtering available for the user:

1. Multi-select filtering - available for qualitative filter criteria that can be grouped by unique items represented in the issue list. Filter criteria list contains the list of unique filter criteria items that are presented in the history of the defined issues list.

2. Range filtering - available for numeric filter criteria that can be filtered by a specific range of numeric values. Filter criteria range slider allows selecting the range within the min and maximum filter criteria numeric values that are presented in the history of the defined issues list.

In order to filter the list of issues:

- 1. Click on the "Filter" button.
- 2. Select the filters that you want to apply.
- 3. Click on "Apply".

Exporting Reports to CSV

Issue Report Exporting functionality allows you to export issue reports list to CSV file with or without filters applied, enabling further offline analysis of report data.

The Issues Export functionality is available on:

- BSOD Crashes page;
- Application Impacting Performance page;
- Battery Issues page;
- HDD/SSD Issues page;
- Windows Device Manager Issues page.

In order to perform Issues List export, you should click on a button "Export List". If there were filters applied, then also confirm if you want to export with or without filters applied.

Issue Tray

When clicking on a particular device row in an Issue Report, the *Issue Tray* is displayed as a slide-in from the right side of the window.

The Issue Tray contains 2 tabs:

- Issue & Remediations.
- Activity History see Device Tray info.



Issue & Remediation tab

Issue & Remediation tab contains:

1. Device Details - information about the device that experienced the selected issue;

2. Selected Issue details;



3. Issue Remediation - suggested remediation that may resolve the issue.



The Issue tray also allows you to provide feedback for a remediation or issue itself to help us better improve the Remedations that are shown for particular issues. (see <u>Feedback</u>).

You are also able to raise a support ticket from the issue tray by clicking on the button "Raise a Lenovo Support Ticket" (see <u>Support Ticketing</u>).

Other Features

Searching Functionality

You can use the Search bar to quickly find a device or issue present in a given list or report table.

Search supports single and multiple character wildcard searches using ? and *:

- The single character wildcard search (?) looks for terms that match that with the single character replaced. For example, to search for "text" or "test", you can input "te?t"
- Multiple character wildcard search (*) looks for 0 or more characters. For example, to search for Windows, Windows95, or WindowsNT, you can input: "win*"

The Search bar is available on the following pages:

- Devices
- Users
- Device Groups
- User Groups
- BSOD Crashes (issue report)
- Application Impacting Performance (issue report)
- Battery Issues (issue report)
- HDD/SSD Issues (issue report)
- Windows Device Manager Issues (issue report)

Issues Feedback

Issues feedback functionality allows you to provide us with feedback regarding the helpfulness of a remediation in resolving a particular issue. This data will be gathered and used to prioritize the remediations shown for a given issue in the future.

In order to send feedback (positive or negative) for a particular issue, you should click on the "yes" or "no" button in the issue tray.



The system will display the feedback modal window with the list of options for selection.

Select the options that are applicable for your case, input details to the displayed text area if any, and click on "Send".

Support Ticketing

About Ticketing



The Support Ticketing feature enables you to quickly act and get support on reported issues. Throughout the portal you will find a button that enables you to quickly raise a support issue for the associated device.

You are able to raise a Support Ticket for a device if it is licensed for Lenovo Device Intelligence (if applicable).

Support Ticket Types

There are two types of support tickets: **Lenovo Device Issue**, and **Platform Support**. These requests are routed to different support teams within Lenovo. A Lenovo Device Issue request is for handling typical Lenovo Support issues that are not necessarily related to (but possibly discovered by) LDI's analytics engine.

If you have a non-Lenovo device, an out-of-warranty device, or an issue or request for Lenovo Device Intelligence, please create a Platform Support request which will be handled by the Lenovo Device Intelligence support team.

In either scenario, a Lenovo Support agent will be in touch shortly after submitting a ticket to assist you with resolving your issue. To decrease the amount of time necessary to provide a helpful response, please include as much detail about the issue that you are encountering, such as Device information, screenshot of what you see in the portal, reproduction steps, observations, and most importantly, remediation steps taken to alleviate or address the issue.

Which Ticket Type to Use

	Lenovo Device Issue	Platform Support
Requirements	 Lenovo device that is licensed for LDI Within Lenovo warranty 	• Device that is licensed for LDI

	Lenovo Device Issue	Platform Support
Examples	 Lenovo hardware issue Battery condition is poor SSD is failing Display is flickering Fingerprint reader not working Thunderbolt not functional Preloaded Lenovo software issue Lenovo Vantage 	 Lenovo Device Intelligence support Setting up your organization portal Adding a device Understanding insights Resolving findings Non-Lenovo hardware issues Hardware issues for Microsoft Surface Software issues for Dell Latitude Out of warranty Lenovo hardware issues

Creating a Lenovo Support Ticket

Support tickets can be created by using the "**Raise a Lenovo Support Ticket**" button within the context of a device or issue. If you use the Raise a Lenovo Support Ticket button to initiate a request, the details from the device will be automatically included in the ticket.

In order to raise a Lenovo Support ticket:

 Click on the button "Raise a Lenovo Support Ticket" in the device tray (for device tickets only) or open Support Ticketing page and select support ticket type. Note: If you select Platform Support issue type, the system will open your default email application with populated prepopulated fields where you should enter the required info.

2. If you select Lenovo Device issue type, enter the serial number of the device. Ticketing is updated to pull fields based on the device serial number requires less input from the user. If the serial number is valid, information for the device will appear. Select the device and the Device Name and Model Type will be populated. Press the Next button. The system will display only fields that are required.

- 3. Click on the button "Raise a Support Email", populate required info in the opened email app and send an email.
- 4. Support team will contact you to help resolve your problem.

Auto Ticketing with Service Groups

A user can create a Service Group by entering information for that group. The system will identify any critical issues with any device that is part of that particular Service Group and automatically create a support ticket.
Create a Service Group

1. Raise a Support Ticket and choose "Or Enable Auto Tickets by CREATING SERVICE GROUPS"



2. Complete the information requested:

- 1. Group Details
- 2. Address
- 3. Contact
- 4. Device
 - 1. Add devices based on Serial Number to this Service Group
- 5. Settings
- 3. Once created, the Service Group will be displayed on the Support Tickets page under the Service Groups tab:

4. View Group Details by selecting the Service Group. User has the ability to Enable Auto Tickets and Raise Tickets Without Review:



5. Devices assigned to this group may be found under the Devices tab:



6. Devices may be removed from the Service Group by selecting the device and choosing the Remove button:



Email Notifications

The portal will send out daily email reports summarizing the issues that are reported in the Dashboard to all users enrolled in your organization. By default, the **Daily Email Summary** report is enabled. Preferences for E-mail Notifications can be configured by selecting User Icon \rightarrow **Preferences** in the top ribbon.

Feedback

We value all feedback from users. A feedback form can be accessed by clicking on the Messaging Icon (\P) in the top ribbon.

Support and Assistance

For any issue related to Lenovo Device Intelligence, please use the Support Ticketing feature as the primary method of requesting support. Refer to the Support Ticketing section of this document for guidance on what type of ticket to create.

If you are unable to access this feature, please send a support request to cspsupport@lenovo.com. The more details that you can provide in the initial email will help to decrease the amount of time necessary to resolve the issue.

Frequently Asked Questions

I am trying to register a new device but it's stuck in the pending state!

For questions regarding device setup, please refer to the troubleshooting section of the **Device Setup Guide**.

I added a new device but I don't see it included in any reports!

It may take up to 24 hours for data from a device to appear in a report. Data for all devices for an organization is analyzed together on a scheduled basis.

I have a non-Lenovo device and that I can't seem activate in the portal!

For questions regarding device setup, please refer to the troubleshooting section of the **Device Setup Guide**. If you believe the issue is caused by not being a Lenovo device, please please communicate details with the Platform Support team so that we can investigate supporting the device.

I have a non-Lenovo device and there's some information missing for it!

Lenovo Device Intelligence strives to follow standard hardware interfaces and achieve the best experience for Lenovo devices. If a device manufacturer hardware interface design is different from the standard, then that particular piece of information may be inaccurate or incomplete. If you experience this problem, please communicate details with the Lenovo Platform Support team so that we can investigate supporting the device.

In particular, details **battery** and **storage** seem to vary across device manufacturers and behavior may be different.