User Guide



IdeaPad Slim 3x (15",10)

Read this first

Before using this documentation and the product it supports, ensure that you read and understand the following:

- Generic Safety and Compliance Notices
- Safety and Warranty Guide
- Setup Guide

Second Edition (April 2025)

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About this guide

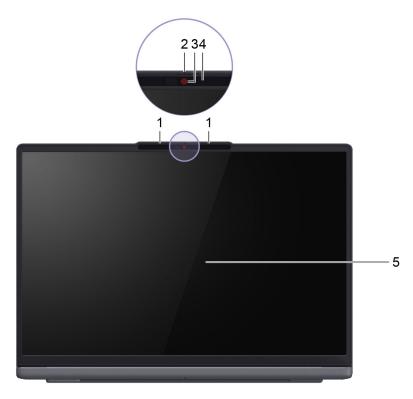
• This guide applies to Lenovo product model(s) listed below. Illustrations in this guide may look slightly different from your product model.

Model name	Machine type (MT)	
- IdeaPad Slim 3 15Q8X10	83N3	
- IdeaPad Slim 3 15Q8X10 1		
IdeaPad Slim 3 15Q8X10 2		

- For further compliance information, refer to the *Generic Safety and Compliance Notices* at https://pcsupport.lenovo.com/docs/generic_notices.
- This guide may contain information about accessories, features, and software that are not available on all models.
- This guide contains instructions that are based on the Windows operating system. These instructions are not applicable if you install and use other operating systems.
- Microsoft® makes periodic feature changes to the Windows® operating system through Windows Update. As a result, the operating system related instructions may become outdated. Refer to Microsoft resources for the latest information.
- The content of the guide is subject to change without notice. To obtain the latest version, go to https://support.lenovo.com.

Chapter 1. Meet your PC

Front view



No.	Description
1	Microphones
2	Camera shutter
3	Camera
4	Camera light
5	Screen

Microphones

The microphones are the PC's built-in sound input devices. They capture your voice and ambient sound and convert them into digital form. Microphones are essential components when you use your PC for video conferencing or voice recording.

Camera shutter

The camera shutter is a sliding cap that you can move to block the camera lens.

Note: The camera shutter is designed for privacy protection. When the camera lens is blocked, the camera function is disabled.

Camera

The built-in camera captures visible light and converts it to digital signals. It is used for video recordings and video conferencing.

Camera light

The camera light indicates whether the camera is activated.

Table 1. Camera light status and description

Camera light status	Description
On	The camera is activated.
Off	The camera is not activated.

Screen

The screen of the built-in display is where text, graphics, and videos are displayed.

Some models offer touch-enabled screens, which allow you to interact with your PC by intuitively touching buttons, icons, and menu items displayed on the screen. Touch-enabled screens also support multi-finger gestures.

Related topics

"Touchpad" on page 3

Base view



No.	Description
1	Speakers
2	Fingerprint sensor
3	Antennas
4	Touchpad
5	Keyboard

Speakers

The speakers are the PC's built-in sound output devices.

Fingerprint sensor

The fingerprint sensor scans your finger to unlock your PC or verify your identity.

Note: You need to enroll one or more fingerprints before using them for identity verification. On a Windows PC, go to **Settings** → **Accounts** → **Sign-in options** to enroll your fingerprints.

Related tasks

"Enroll your fingerprints" on page 15

Antennas

The antennas transmit and receive radio waves to allow data to be transferred between your PC and a Wi-Fi network device or a Bluetooth device.

Note: The antennas are hidden inside the PC.

Touchpad

The touchpad is the PC's built-in pointing device. Slide your finger on the touchpad to move the pointer on the screen and tap or double-tap to select or execute a screen item.

The touchpad also supports Windows multi-finger gestures, providing a convenient alternative for switching between app windows and the desktop, activating the search box, or adjusting volumes.

Related topics

"Touchpad gestures" on page 25

Keyboard

The keyboard is the PC's built-in input device for typing characters. It also includes keys that can make you more productive when interacting with the PC, apps, and the Windows operating system.

Note: Keyboard layouts vary by language and geographical location. The keyboard on your PC may look slightly different from those depicted in the product illustrations in this publication.

Related topics

"Shortcut keys" on page 21

Left view



No.	Description
1	Power connector
2	Charging light
3	USB Standard-A connector
4	HDMI™ connector
5	Multi-purpose USB Type-C® connector
6	Combo audio jack

Power connector

Use this connector and the included ac power adapter to connect your PC to an electrical outlet.

Charging light

The charging light indicates whether the PC is plugged into an electrical outlet. When the PC is plugged into an electrical outlet, the color of the light indicates whether the battery is fully charged (or will shortly be fully charged).

Table 2. Charging light status and description

Light status	Plugged in?	Battery charge level
Off	No	/
On, amber	Yes	1%–90%
On, white	Yes	91%–100%

USB Standard-A connector

The USB Standard-A connector is used to connect storage or peripheral devices that follow the universal serial bus (USB) specification for data transfer and device interconnection.

HDMI connector

The HDMI connector is used to connect an external display device, such as a television, a projector, or a monitor.

Multi-purpose USB Type-C connector

This multi-purpose USB Type-C® connector is used to connect:

- Storage or peripheral devices that follow the universal serial bus (USB) specification for data transfer and device interconnection
- Display devices

Note: When connecting display devices, you need to use appropriate cables and adapters (if needed) according to the connection capabilities of the display device.

Related topics

"Connecting external displays" on page 21

Combo audio jack

The combo audio jack is used to connect single-plug headsets, headphones, or external speakers.

Right view



No.	Description
1	Novo button hole
2	Power light
3	Power button
4	SD card slot
5	USB Standard-A connector

Novo button hole

When the PC is powered off, you can press the Novo button to display the Novo button menu. From the menu, you can then choose to:

- · Open the firmware setup utility
- Display the boot device selection menu
- Display the Windows advanced startup options page

Note: The Novo button is rarely used during normal PC operations. To prevent users from accidentally pressing it, the Novo button is placed in a recessed hole. You can use a straightened paper clip to press this button.

Power light

The power light indicates the current power state of the PC: whether it is powered on, powered off, in sleep mode, or in hibernation mode.

When the PC is powered on, this light can also indicate low battery by blinking rapidly.

Table 3. Power light status and description

Light status	Power state	Battery charge level
White (solid on)	Powered on	21%–100%
White (blinking rapidly)	Powered on	1%–20%

Table 3. Power light status and description (continued)

Light status	Power state	Battery charge level
White (blinking slowly)	In sleep mode	/
Off	Powered off or in hibernation mode	/

Power button

Press the power button to turn on your PC.

Note: By default, on a Windows PC, pressing the power button when the PC is turned on will put the PC into sleep mode.

SD card slot

The SD card slot is used to insert an SD, SDHC, or SDXC memory card to transfer data between the memory card and your PC.

USB Standard-A connector

The USB Standard-A connector is used to connect storage or peripheral devices that follow the universal serial bus (USB) specification for data transfer and device interconnection.

Bottom view



No.	Description
1	Air vents (intake)

Avoid constant body contact with specific hot sections

CAUTION:

When the computer is operating, it should be placed on a hard and flat surface with its bottom area not in contact with user's bare skin. Under normal operating conditions, the temperature of the bottom surface will remain within an acceptable range as defined in IEC 62368-1, but such temperatures can still be high enough to cause discomfort or harm to the user if directly touched for over one minute at a time. As such, it is recommended that users avoid prolonged direct contact with the bottom of the computer.

Air vents (intake)

The air vents allow air to be sucked inside of the PC to cool the internal components.

Important: When the PC is operating, do not place it on a bed, sofa, carpet, or other flexible surfaces. Otherwise, the air vents will be blocked and the PC may overheat, reducing performance or causing the PC to be unresponsive or even shut down.

Specifications

Dimensions

Item	Value or specification
Width	343.4 mm
Depth	239.5 mm241.5 mm
Thickness	16.9 mm (thinnest part)17.9 mm (thickest part)

ac power adapter

Item	Value or specification
Plug type	Round plug, orUSB Type-C
Input	100-240 V ac, 50-60 Hz
Output voltage	20 V
Maximum current	3.25 A
Maximum power	65 W

Rechargeable battery pack

Item	Value or specification
Capacity	• 50 Wh, or
	• 60 Wh
Cell type	Rechargeable Li-ion Battery
Number of cells	3

Memory

Item	Value or specification
Туре	LPDDR5X
Installation	Onboard
Number of DIMM slots	0

Mass storage device

Item	Value or specification
Туре	SSD
Slot	M.2 (2242)
Interface	PCIe Gen4

Display

Item	Value or specification
Size	15.3 inches, or15.1 inches
Туре	IPS, or OLED
Resolution	 1920 × 1200 (WUXGA), or 2560 × 1600 (WQXGA)

Connectors

Item	Value or specification	
Combo audio jack	Diameter: 3.5 mm	
	Supported plugs:	
	- 3-pole, TRS	
	- 4-pole, TRRS (CTIA and OMTP)	
HDMI connector	, pois,	
HDIVII COIIIIeCtoi	 Supported signaling protocol: Transition minimized differential signaling (TMDS) 	
	Maximum output resolution: 3840 × 2160 @ 30 Hz	
Memory card slot	Supported card types:	
	SD card	
	SDHC card	
	SDXC card	
USB Standard-A connector	Quantity: 2	
	Maximum power output: 5 V, 0.9 A	
	Supported signaling protocols:	
	- USB 2.0 480 Mbps	
	Note: It is recommended to connect the left USB Standard-A connector to	
	a full-speed or high-speed device for device stability and data safety.	
	- SuperSpeed USB 5 Gbps	
Multi-purpose USB Type-C	Quantity: 1	
connector	Maximum power output: 5 V, 3 A	
	Maximum power input: 20 V, 3.25 A	
	Protocols:	
	- USB 2.0 480 Mbps	
	Note: It is recommended to connect the USB Type-C connector to a full-speed or high-speed device for device stability and data safety.	
	- SuperSpeed USB 5 Gbps	
	- DisplayPort™ 1.2	

Note: Data transmission rates are presented as maximum theoretical values in compliance with applicable specifications. The actual data transmission rates depend on various factors, including the performance of the connected devices and the quality of the cables being used. These rates are typically slower than the maximum theoretical values listed.

Networking

Item	Value or specification			
Wi-Fi standards	• 802.11 a/b/g			
	802.11n802.11ac wave 2			
	• Wi-Fi 6 (802.11ax)			
	Wi-Fi 6E, or			
	• Wi-Fi 7			
	Note: Different Wi-Fi standards may operate on different frequency bands. In some countries or regions, certain frequency bands may be prohibited for unlicensed use or may require specific conditions. Wi-Fi 6E and Wi-Fi 7 on this PC are disabled in some countries or regions in accordance with local regulations.			
Bluetooth	Bluetooth 5.3, or			
	Bluetooth 5.4			

Statement on USB transfer rate

Depending on many factors such as the processing capability of the host and peripheral devices, file attributes, and other factors related to system configuration and operating environments, the actual transfer rate using the various USB connectors on this device will vary and will be slower than the data rate listed below for each corresponding device.

USB device	Data rate (Gbit/s)
3.2 Gen 1	5

Operating environment

Maximum altitude (without pressurization)

3048 m (10 000 ft)

Temperature

- At altitudes up to 2438 m (8000 ft)
 - Operating: 5°C to 35°C (41°F to 95°F)
 - Storage: 5°C to 43°C (41°F to 109°F)
- At altitudes above 2438 m (8000 ft)
 - Maximum temperature when operating under the unpressurized condition: 31.3°C (88°F)

Note: When you charge the battery, its temperature must be no lower than 10°C (50°F).

Relative humidity

Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)

• Storage: 5% to 95% at wet-bulb temperature 27°C (81°F)

Chapter 2. Explore your PC

Your PC and its operating system

The operating system is the most important software installed on a PC. The operating system manages the PC's hardware devices, provides utility apps and user interfaces, and allows various apps to be installed so that a PC can be used for different purposes.

Your PC is pre-installed with the Windows 11 operating system.

Initial setup of the Windows operating system

When you turn on your PC for the first time, the Windows operating system will guide you through the initial setup process. Most importantly, you will:

- · Create a user account
- Connect to a wireless network that has Internet access
- Select language-related settings

Note: If you choose to set up Windows for personal use, you are required to either use an existing Microsoft account or create a new one as your user account. After the initial setup, you have the option to switch to a local account.

Enroll your fingerprints

You can use the biometric fingerprint option to sign in to Windows quickly if your computer includes a fingerprint sensor. This sign-in option provides a reliable and secure way of identity verification.

- Step 1. Select Start → Settings → Accounts → Sign-in options.
- Step 2. Under **Ways to sign in**, select **Fingerprint recognition (Windows Hello)** to set up sign-in with a fingerprint sensor.
- Step 3. Follow the on-screen instructions to enroll your fingerprints.

Notes:

- You need to set up a PIN code before you are allowed to use this sign-in option.
- It is recommended that you enroll multiple fingerprints in case of any injuries to your fingers.

Windows Update

From time to time, your PC receives update notifications. These may include new features, security updates, and new device drivers. While security-related updates are typically downloaded and installed automatically, you can manually control the installation of other available updates.

In Windows Update, you can view available updates, manually check for updates, and configure update-related settings. To navigate to Windows Update, select **Settings Windows Update**.

Windows recovery options

When using your PC and the operating system, you may encounter problems. Windows provides several recovery options for you to restore it back to normal. The following table will help you decide which option to use for various circumstances.

Table 4. Windows recovery options

Circumstances	Recovery options	
Windows runs much slower after you install an app.	Restore Windows from a system restore point.	
Windows hasn't been functioning properly for some time.	Reset your PC while keeping your personal files.	
Your PC won't start.	Utilize Windows startup repair function.	
Your PC won't start and cannot be repaired using Windows startup repair function.	Use a recovery drive to restore Windows.	

Reset Windows

Resetting Windows allows you to reinstall the operating system while retaining your personal files. This gives the operating system a fresh start and, in some cases, restores the PC's original performance.

- Step 1. Select **Settings** → **System** → **Recovery**.
- Step 2. Under recovery options, select **Reset PC**. When prompted, choose between **Keep my files** and **Remove everything**.
- Step 3. Follow the on-screen instructions to complete the reset process.

Create a recovery drive

It is a good idea to create a recovery drive when you have finished setting up Windows for the first time. If you experience a major issue and your Windows cannot start, you can use the recovery drive to restore Windows onto your PC.

- Step 1. Prepare an empty USB drive with a storage capacity of 16 GB or more.
- Step 2. In the search box on the taskbar, type Create a recovery drive and select the matched app.
- Step 3. Make sure Back up system files to the recovery drive checkbox is selected and select Next.
- Step 4. When prompted, connect the USB drive to your PC, select it, and then select Next.
- Step 5. Select Create.

Restore Windows using a recovery drive

If your Windows won't start, you can use a previously created recovery drive to restore Windows onto your PC.

- Step 1. Shut down your PC.
- Step 2. Connect the recovery drive to your PC.
- Step 3. Press the Novo button or the Lenovo Smart Key 🌣 to open the Novo button menu.
- Step 4. Select Boot Menu.
- Step 5. Select the USB drive as the boot device. The PC will start to the Windows Recovery Environment.
- Step 6. Follow the on-screen instructions to restore Windows on your PC.

Use power efficiently

As an electronic device, your PC requires electricity to operate. The Windows operating system provides advanced power management features for the devices included in your PC. You can take advantage of these features to use your PC in an energy-efficient manner.

Shut down your PC

When you have finished using your PC and do not plan to resume using it in a short while, shut it down.

- Step 1. Select Start → Power.
- Step 2. Select Shut down.

Put your PC into sleep mode

If you need to stop using your PC but plan to resume using it shortly, you can put it into sleep mode. Your PC resumes faster from sleep mode and you can return to where you left off with your work.

- Step 1. Select **Start** → **Power**.
- Step 2. Select Sleep.

Adjust timeouts for sleep and the built-in screen

Setting appropriate timeouts for sleep and the built-in screen is an effective way to save energy. This feature enables the screen and other devices to enter power-saving mode when the PC is left inactive for a specified period of time. The Windows operating system has default timeout settings enabled. You can adjust the settings to suit your preference.

- Step 1. Select Settings → System → Power & battery → Screen, sleep, & hibernation timeouts.
- Step 2. Adjust the settings.

For notebook PCs, you can set separate timeouts for two usage scenarios: when the PC is plugged in and when it is running on battery.

The default timeouts for sleep and the built-in screen

The operating system of your PC has the following timeouts enabled by default. You can adjust them to suit your preference.

Note: Setting appropriate timeouts is an effective way to save energy. Avoid setting excessively long timeouts to effectively disable this power-saving feature.

Table 5. Default timeouts

Power saving action	Power state	Timeout
Turn off the screen	Plugged in	5 minutes
	On battery	3 minutes
Put the PC into sleep mode	Plugged in	5 minutes
	On battery	3 minutes

Note: To wake the PC from sleep mode, press the power button or any key on the keyboard.

Switch the PC's active power mode

The Windows operating system provides three preset power modes for easy management of the PC's power usage. You can switch the PC's active power mode according to your preferences for using your PC.

- Step 1. Select **Settings** → **System** → **Power & battery**.
- Step 2. Under **Power mode**, choose a power mode that best match your current pattern of PC usage.

If your PC is plugged in and you want the best performance, select Best Performance. If your PC is running on battery power and you want it to last as long as possible, select Best Power efficiency.

Note: You can also use the keyboard shortcut fn + Q to quickly and easily switch the active power mode.

Set up Internet access

In your home or office, Internet access is typically provided through Wi-Fi-enabled networks. You can connect to such a network to access the Internet. The Windows operating system provides utilities that assist in searching, connecting to, and managing wireless networks within range.

- Step 1. Select the Network, Sound, and Battery icons () on the right side of the taskbar to open quick settings.
- Step 2. On the quick settings pane, select the > symbol next to the network icon. Wireless networks within range should be displayed.
- Step 3. Select the network you want to connect to and then select **Connect**.
- Step 4. Enter the network security key when prompted.

Unique Lenovo apps

Lenovo Al Now

Lenovo AI Now is your personal and private AI assistant. It enables you to boost your productivity by building your personal knowledge library, helps you with inspiration, writing and summarizing, and provides troubleshooting and quick settings for your PC.

To open Lenovo Al Now, type Lenovo AI Now in the Windows search box and select the matched result. Alternatively, you can also press the hotkey marked with 🕸 as a shortcut.

Notes:

- Lenovo Al Now is not available on all product models. For those models not pre-installed with this app, pressing the hotkey will open the Lenovo Vantage.
- · Lenovo Al Now makes periodic updates to keep improving your experience. Features may be added or modified after updates are installed.

Smart Connect

Smart Connect is an app that can easily pair your PC with your Motorola smartphone and Lenovo tablet. With Smart Connect, you can:

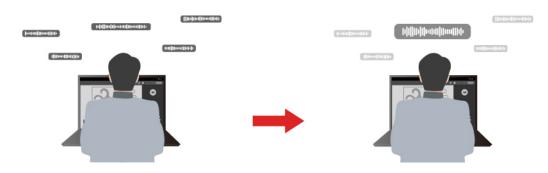
- Access mobile apps on your PC
- · Quickly share content between connected devices
- Mirror your phone display or create a virtual phone screen on your PC
- Copy and paste across connected devices
- Use your phone or tablet camera as the PC webcam
- Control your phone or tablet using your PC keyboard and mouse
- Extend or mirror your PC display on the tablet

To open Smart Connect, you can type Smart Connect in the Windows search box and then select the matched result.

Note: Smart Connect makes periodic updates to keep improving your experience. Features may be added or modified after updates are installed.

Smart Noise Cancelling

Smart Noise Cancelling is a noise reduction feature available on some Lenovo product models. By filtering out input and output noises, Smart Noise Cancelling enhances your audio experience.



Function	Description	Remarks	
	Voice Recognition: Your computer captures multiple voices in a way that reflects their original spatial positions.		
Microphone noise cancelling	Only My Voice: This option requires you to record your voice so that your computer captures this voice only and tries to eliminate other voices. Note: To remove your voice record, select REMOVE MY VOICE.	This function takes effect only when built-in microphones/arrays or 3.5 mm jack wired microphones are used as the input media.	
	Normal : Your computer focuses on the voice of the person facing it and reduces ambient sounds.	To disable this function, select Off .	
	Multiple Voices : Your computer captures multiple voices from an expanded range in front of the computer.		
Speaker noise cancelling	Your computer filters out other sounds to play only human voices.	These functions are not applicable to scenarios like	
Meeting noise cancelling	When this function is selected, your computer uses special algorithms for noise reduction when you are using conferencing applications.	listening to music and watching videos.	

Notes:

- Depending on its hardware, your computer may not support all the functions and options described above.
- You can view and customize this feature under **Device Settings** in Lenovo Vantage or Lenovo PC Manager.

Lenovo Vantage

Lenovo Vantage is a one-stop solution to help you update your computer, configure hardware settings, and access personalized support.

If your computer is pre-installed with Lenovo Vantage, type Vantage in the Windows search box to launch this app.

Notes:

- Available features may vary depending on your computer model.
- You can download the latest version of this app from Microsoft Store.

Interact effectively with your PC

You interact with your PC through its input and output devices. You spend a significant amount of time looking at the screen, where the user interface and content are displayed. The speakers produce sound, allowing you to listen to music or a voice recording. You type with the keyboard and navigate with the touchpad. You can join and participate in a web conference using the built-in camera and microphone.

Apart from the built-in devices, you can connect both wired and wireless external devices to enhance your interaction with your PC.

The display device

The built-in display is your PC's primary visual output device. Your PC is equipped with one USB Type-C connector and one HDMI connector, both of which support visual output. You can connect up to two external display devices to your PC to enhance productivity.

Touch screen gestures

For computers with a touch-enabled screen, you can tap or swipe on the screen to interact with your PC. In addition, the Windows operating system also supports multi-finger gestures on the touch screen to enhance productivity while interacting with the operating system.

Table 6. Touch screen gestures

Gesture	Function
Swipe in from the left edge of the screen	Shows Widgets
Swipe in from the right edge of the screen	Shows Notification Center
Swipe in from the bottom edge of the screen	Shows the Start menu
Swipe vertically with two fingers	Scrolls pages
Place two fingers on the screen and pinch in or stretch out	Zooms out / zooms in
Swipe up with three fingers	Shows all open windows
Swipe down with three fingers	Retruns to the desktop

Turn on night light

Night light is a switch in Windows that you can turn on and off. When it is turned on, your screen shows warmer colors and the amount of emitted blue light is reduced. Enabling night light reduces the chances of developing eye fatigue or eye strain.

- Step 1. Click the notification icon in the Windows notification area.
- Step 2. Click the Night light icon to turn it on or off.

Note: Click Expand if you cannot find the night light icon.

For more guidance on reducing eye fatigue or eye strain, go to https://www.lenovo.com/us/en/compliance/visual-fatigue.

Adjust color temperature

If Windows 11 night light mode is turned on, you can adjust the color temperature of the screen.

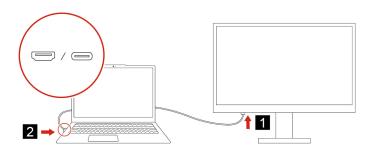
- Select Start → Settings.
- Step 2. Select System → Display → Night light settings.
- Step 3. Move the slider to adjust the color temperature.

Note: Selected Lenovo computers are low blue-light certified. These computers are tested with night light turned on and color temperature value set at 48 or above.

Connecting external displays

You can use the HDMI connector and the USB Type-C connector on your PC to connect external display devices directly.

- HDMI connector: Use a double-sided HDMI connector to connect the display to the HDMI connector on the left side of your PC.
- USB Type-C connector: If the external display is equipped with a USB Type-C connector that supports DisplayPort Alt Mode, you can use a double-sided USB Type-C cable to connect the display to any of the USB Type-C connectors on your PC.



Keyboard

Shortcut keys

A Lenovo keyboard usually includes the following shortcut keys that you can use to quickly access apps or adjust settings.

- Functions keys (F1–F12)
- Hotkeys
- Combination keys using the fn key
- · Combination keys using the Windows logo key
- The Copilot key

Hotkeys

Hotkeys provide quick access to settings and apps that you may frequently use. They are located in the top row of the keyboard and usually share keys with function keys (F1-F12) and other keys. The function that each hotkey provides is denoted by the icon printed on the key.

Table 7. Hotkey functions

Hotkey icon	Function description
٩×	Mutes/Unmutes sound.
₫ >	Decreases volume.
4)	Increases volume.
Ф×	Enables/Disables the microphone.
*	Decreases screen brightness.
*	Increases screen brightness.
亞	Selects and sets up display devices.
\$	Enables/Disables airplane mode.
®	Opens the Settings app.
۵	Locks the screen.
ra ra	Opens the Smart Connect app or the Phone Link.
	Opens the Calculator app.
\$	Opens the Lenovo Al Now app or the Lenovo Vantage.
Cļ.	Opens the Snipping tool.
DII	Starts/Pauses audio or video playback.
	Stops audio or video playback.
14	Plays the previous audio or video in the playlist.
DI	Plays the next audio or video in the playlist.
715	Adjusts the keyboard backlight.

Note: To use the function keys, hold down the fn key and press the corresponding hotkeys. If you need to use function keys regularly, you may consider turning on the fn lock to set the function keys as the primary function of these dual-function keys.

The fn lock switch

The fn lock is an electronic switch that affects how you use hotkey functions. To turn it on and off, press fn + esc.

Note: The esc key is in the upper left corner of the keyboard. It has an LED that indicates the status of the fn lock switch.



Figure 1. Locations of the fn lock key and the fn key

A Lenovo keyboard usually contains hotkeys in the top row. These hotkeys share keys with the function keys (F1-F12) and other keys. For these dual-function keys, the icons or characters denoting the primary functions are printed on top of the icons and characters denoting the secondary functions.

- A: an icon or character denoting the primary function
- B: an icon or character denoting the secondary function

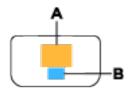


Figure 2. The layout of a dual-function key

Table 8. fn lock and dual-function keys

fn lock (esc) LED	fn lock status	Pressing the hotkey alone	Pressing the hotkey while holding down the fn key
Off	Disabled	Primary function	Secondary function
On	Enabled	Secondary function	Primary function

Combination keys using the fn key

The fn key can be used in combination with certain keys to adjust device settings or activate additional functions.

Table 9. fn-based key combinations

Key combination	Function
fn + Q	Switches the PC's active power mode
fn + M	Enables/disables the touchpad
fn + N	Shows key device information
fn + Space*	Adjusts keyboard backlight
fn + B	Break
fn + P	Pause
fn + S	SysRq

Table 9. fn-based key combinations (continued)

Key combination	Function
fn + K	ScrLk
fn + I	Insert
fn + T	PrtScr
fn + left arrow	Home
fn + right arrow	End
fn + up arrow	PgUp
fn + down arrow	PgDn

^{*} for selected models

Combination keys using the Windows logo key

The Windows logo key is located in the lower-left corner of the keyboard. It can be used alone or in combination with certain keys to quickly change settings and access utilities of the Windows operating system. The following table lists frequently used combination keys. For the complete list of all Windows logo key-based key combinations, please refer to Microsoft online documentation.

Table 10. Windows logo key-based key combinations

Key or key combination	Function
Windows logo key ■	Opens or closes the Start menu
+ A	Opens or closes Quick Settings
+ D	Returns to the desktop
+ E	Opens File Explorer
+	Opens Settings
+ L	Locks the screen
+ M	Minimizes all open windows
+ N	Opens or closes the Notification Area
+ P	Switches multi-screen modes
+ W	Opens or closes Widgets
+; (semicolon)	Opens the emoji panel
+ Tab	Opens or closes Task View
+ PrtSc	Takes a full-screen screenshot and saves it to a file

The Copilot key

The era of AI has arrived, and many Lenovo PCs now include a Copilot key on the keyboard. It is located either in the bottom or the top row of the keyboard and is marked with .

For Windows PCs with Copilot in Windows available and enabled, pressing the Copilot key opens Copilot in Windows. Otherwise, pressing the Copilot key opens Windows Search.

Note: Copilot in Windows may not be available in all geographical locations. In regions where Copilot in Windows is available, you may need to update your Windows operating system to version 23H2 or later through Windows Update for Copilot in Windows to become available.

Touchpad gestures

The touchpad is your PC's built-in pointing device. You can tap and swipe on the touchpad to navigate within the operating system and within apps. In addition, the Windows operating system also supports multifinger gestures on the touchpad to enhance productivity while interacting with the operating system.

Table 11. Multi-finger touchpad gestures

Gesture	Function
Swipe vertically with two fingers	Scrolls pages
Place two fingers on the touchpad and pinch in or stretch out	Zooms out / zooms in
Tap two fingers on the touchpad	Displays the context menu (right-clicking)
Swipe up with three fingers	Shows all open windows
Swipe down with three fingers	Returns to the desktop
Swipe left or right with three fingers	Switches between open apps
Tap three fingers on the touchpad	Opens Windows Search

Related topics

Modify the default functions for touchpad gestures

The functions for three-finger touchpad gestures can be modified in Windows Settings.

- Select Settings → Bluetooth & devices → Touchpad.
- Step 2. Under Three-finger gestures, use the drop-down lists to modify the functions for the swipe or tap gestures.

Bluetooth connectivity

Bluetooth is a short-range wireless technology commonly used for connections between nearby devices. Your PC is equipped with a built-in Bluetooth adapter. You can connect other Bluetooth-enabled devices to your PC. Bluetooth-enabled headphones, earbuds, loudspeakers, keyboards, and mouses are among the devices you may consider connecting to your PC.

Connect a Bluetooth-enabled device to your PC

Establishing a Bluetooth connection requires actions on both the device and your PC. Turn on the device and make it discoverable before performing any actions on your PC.

- Step 1. Select Settings → Bluetooth & devices → Add device → Bluetooth.
- Step 2. Select the device you want to connect, and then select **Connect**.
- Step 3. Depending on the type of device, you may need to either confirm the connection on the device side or enter a pairing code on your PC.

When a Bluetooth-enabled device is connected to your PC, its name and status are displayed under Bluetooth & devices on your PC.

[&]quot;Shortcut keys" on page 21

The firmware of your PC

When you turn on the power, a series of instructions are executed inside your PC to initiate devices, locate a boot device, and look for a program called bootloader. The bootloader will then find the operating system installed on your PC and hand over control to it. When the operating system is started, your PC is ready for use.

These instructions are stored on a Flash chip on the PC's system board. The Flash chip and the instructions stored on it are referred to as the PC's firmware.

The utility program for the PC's firmware

Lenovo PCs typically come with a setup utility for their firmware. Within the setup utility, you can:

- · View information about your PC and its devices
- · Change device settings
- · Change the order of boot devices
- Set passwords for the firmware or the mass storage device

Note: You should rarely need to use the setup utility in your daily PC usage. To view device information, you can use the utilities provided by the operating system or apps provided by Lenovo (Lenovo Vantage or Lenovo PC Manager). You can use the Novo button menu to temporarily change the order of boot devices.

There are several ways to open the utility program:

- Utilize the Advanced startup feature of the Windows operating system
- Use the Novo button menu
- Start or restart your PC and press an interrupt key (F1 or F2)

Set passwords in the firmware setup utility

You can set passwords in the firmware setup utility to secure access to the utility program or the mass storage device.

Password types

You can set various types of passwords in the firmware setup utility.

Password type	Pre-requisite	Usage
Administrator password	No	You must enter it to start the setup utility.
User password	The administrator password must be set.	You can use the user password to start the setup utility.
Master hard disk password	No	You must enter it to start the operating system.
User hard disk password	The master hard disk password must be set.	You can use the user hard disk password to start the operating system.

Note: If you start the setup utility using the user password, you can only change a few settings.

Set administrator password

You set the administrator password to prevent unauthorized access to the firmware setup utility.

Attention: If you forget the administrator password, a Lenovo authorized service personnel cannot reset your password. You must take your computer to a Lenovo authorized service personnel to have the system board replaced. Proof of purchase is required and a fee will be charged for parts and service.

- Step 1. Open the firmware setup utility.
- Step 2. Select **Security** → **Set Administrator Password** and press enter.
- Step 3. Enter a password string that contains only letters and numbers and then press enter
- Step 4. Enter the password again and press enter.
- Step 5. Select Exit → Exit Saving Changes.

Next time you start the computer, you must enter the administrator password to open the setup utility. If Power on Password is enabled, you must enter the administrator password or the user password to start the computer.

Change or remove administrator password

Only the administrator can change or remove the administrator password.

- Step 1. Open the firmware setup utility using the administrator password.
- Step 2. Select Security → Set Administrator Password and press enter.
- Step 3. Enter the current password.
- Step 4. In the **Enter New Password** text box, enter the new password.
- In the **Confirm New Password** text box, enter the new password again.

Note: If you want to remove the password, press enter in both text boxes without entering any character.

Step 6. Select Exit → Exit Saving Changes.

If you remove the administrator password, the user password is also removed.

Set user password

You must set the administrator password before you can set the user password.

The administrator of the setup utility might need to set a user password for use by others.

- Step 1. Open the firmware setup utility using the administrator password.
- Step 2. Select **Security** → **Set User Password** and press enter.
- Enter a password string that contains only letters and numbers and then press enter. Step 3. The user password must be different from the administrator password.
- Step 4. Enter the password again and press enter.
- Step 5. Select Exit → Exit Saving Changes.

Enable power-on password

If the administrator password has been set, you can enable power-on password to enforce greater security.

- Step 1. Open the firmware setup utility.
- Step 2. Select **Security** → **Power on Password** and press enter.

Note: The administrator password must be set in advance.

- Step 3. Change the setting to **Enabled**.
- Step 4. Select Exit → Exit Saving Changes.

If power-on password is enabled, a prompt appears on the screen every time you turn on the computer. You must enter the administrator or user password to start the computer.

Set passwords for the mass storage device

You can set a hard disk password in the setup utility to secure access to your data storage on the PC's mass storage device.

Attention: Be extremely careful when setting a hard disk password. If you forget the hard disk password, a Lenovo authorized service personnel cannot reset your password or recover data from the hard disk. You must take your computer to a Lenovo authorized service personnel to have the hard disk drive replaced. Proof of purchase is required and a fee will be charged for parts and service.

- Step 1. Open the firmware setup utility.
- Step 2. Select **Security** → **Set Hard Disk Password** and press enter.

Note: If you start the setup utility using the user password, you cannot set hard disk password.

Step 3. Follow on-screen instructions to set both master and user passwords.

Note: The master and user hard disk passwords must be set at the same time.

Step 4. Select Exit → Exit Saving Changes.

If the hard disk password is set, you must provide the correct password to start the operating system.

Change or remove passwords for the mass storage device

- Step 1. Open the firmware setup utility.
- Step 2. Select Security.
- Step 3. Change or remove the hard disk password.

To change or remove master password, select **Change Master Password** and press enter.

Note: If you remove the master hard disk password, the user hard disk password is also removed.

To change user password, select **Change User Password** and press enter.

Note: The user hard disk password cannot be removed separately.

Step 4. Select Exit → Exit Saving Changes.

Chapter 3. Help and support

Frequently asked questions

What should I do if my computer stops responding

Press and hold the power button until the computer turns off. Then restart the computer.

What should I do if I spill liquid on the computer

1. Carefully unplug the ac power adapter and turn off the computer immediately. The more quickly you stop the current from passing through the computer the more likely you will reduce damage from short circuits.

Attention: Although you might lose some data or work by turning off the computer immediately, leaving the computer on might make your computer unusable.

2. Wait until you are certain that all the liquid is dry before turning on your computer.

CAUTION:

Do not try to drain out the liquid by turning over the computer. If your computer has keyboard drainage holes on the bottom, the liquid will be drained out through the holes.

Why does my computer start automatically when I open the lid

Your computer may have Flip to Start enabled. Many Lenovo notebook computers include a sensor that can detect the angle at which the lid is opened. When you open the lid, the sensor can detect this behavior. If Flip to Start is enabled, the computer will respond by starting up automatically.

If you don't like this feature, you can disable it. Flip to Start can be enabled or disabled in the setup utility program for the PC's firmware.

Self-help resources

Use the following self-help resources to learn more about the computer and troubleshoot problems.

Resources	How to access?
Troubleshooting and frequently asked questions	https://www.lenovo.com/tipshttps://forums.lenovo.com
Accessibility information	https://www.lenovo.com/accessibility
Product documentation:	
Generic Safety and Compliance Notices	1. Go to https://support.lenovo.com .
Safety and Warranty Guide	2. Detect your computer or select computer model
Setup Guide	manually.
This User Guide	Select Guides & Manuals and filter out the documentation you want.
Regulatory Notice	documentation you want.

How to access?
Visit https://support.lenovo.com
Use Get Help or Tips .
Use Windows Search.
 Microsoft support Web site: https://support.microsoft.com

What is a CRU?

Customer replaceable units (CRUs) are parts that can be upgraded or replaced by the customer. A Lenovo computer may contain the following types of CRUs:

Self-service CRU	Parts that can be installed or replaced easily by customer themselves or by trained service technicians at an additional cost.
Optional-service CRU	Parts that can be installed or replaced by customers with a greater skill level. Trained service technicians can also provide service to install or replace the parts under the type of warranty designated for the customer's machine.

If you intend to install a CRU, Lenovo will ship the CRU to you. You might be required to return the defective part that is replaced by the CRU. When return is required: (1) return instructions, a prepaid shipping label, and a container will be included with the replacement CRU; and (2) you might be charged for the replacement CRU if Lenovo does not receive the defective CRU within thirty (30) days of your receipt of the replacement CRU. For full details, see the Lenovo Limited Warranty at https://www.lenovo.com/warranty/llw_02.

CRUs for your product model

The table below lists the CRUs and CRU types that are defined for your product model.

Part	Self-service CRU	Optional-service CRU
Power cord	X	
ac power adapter	X	

Notes:

 CRU replacement instruction is provided in one or more of the following publications and are available from Lenovo at any time upon your request.

the product User Guide

the printed publications that came with the product

 Replacement of any parts not listed above, including the built-in rechargeable battery, should be done by a qualified repair technician or by ensuring that you carefully follow all instructions provided by Lenovo.

You can also find Lenovo-authorized repair facilities by going to https://support.lenovo.com/partnerlocator for more information.

Call Lenovo

If you have tried to correct the problem yourself and still need help, you can call Lenovo Customer Support Center.

Before you contact Lenovo

Record product information and problem details before you contact Lenovo.

Product information	Problem symptoms and details
Product name	What is the problem? Is it continuous or intermittent?
Machine type and serial number	Any error message or error code?
	What operating system are you using? Which version?
	 Which software applications were running at the time of the problem?
	Can the problem be reproduced? If so, how?

Note: The product name and serial number can usually be found on the bottom of the computer, either printed on a label or etched on the cover.

Lenovo Customer Support Center

During the warranty period, you can call Lenovo Customer Support Center for help.

Telephone numbers

For a list of the Lenovo Support phone numbers for your country or region, go to https://pcsupport.lenovo.com/supportphonelist.

Note: Phone numbers are subject to change without notice. If the number for your country or region is not provided, contact your Lenovo reseller or Lenovo marketing representative.

Services available during the warranty period

- Problem determination Trained personnel are available to assist you with determining if you have a hardware problem and deciding what action is necessary to fix the problem.
- Lenovo hardware repair If the problem is determined to be caused by Lenovo hardware under warranty, trained service personnel are available to provide the applicable level of service.
- Engineering change management Occasionally, there might be changes that are required after a product has been sold. Lenovo or your reseller, if authorized by Lenovo, will make selected Engineering Changes (ECs) that apply to your hardware available.

Services not covered

- · Replacement or use of parts not manufactured for or by Lenovo or nonwarranted parts
- Identification of software problem sources
- Configuration of UEFI/BIOS as part of an installation or upgrade
- Changes, modifications, or upgrades to device drivers
- Installation and maintenance of network operating systems (NOS)
- Installation and maintenance of programs

For the terms and conditions of the Lenovo Limited Warranty that apply to your Lenovo hardware product, see "Warranty information" in the Safety and Warranty Guide that comes with your computer.

Purchase additional services

During and after the warranty period, you can purchase additional services from Lenovo at https://pcsupport.lenovo.com/warrantyupgrade.

Service availability and service name might vary by country or region.

Chapter 4. PC and accessibility

PCs are powerful general-purpose computing devices that many individuals rely on for accessing information, connecting with friends, pursuing education, conducting research, and completing work tasks. This reliance extends to individuals with vision, hearing, cognitive, or mobility impairments, as well as to those whose abilities may decline due to illness or aging.

This chapter explores the accessibility features available on your Lenovo PC, including both hardware components and those offered by the pre-installed operating system. By gaining a comprehensive understanding of the available accessibility features and how to activate and configure them, you can enhance your PC's usability for individuals with disabilities.

Accessibility features of the PC hardware

Lenovo PCs are designed with accessibility in mind. Throughout the design process, special considerations are prioritized for individuals with disabilities and best industry practices are implemented in hardware design.

USB connectors for connecting assistive technology devices

Several types of assistive technology devices are available on the market that can be connected to a PC to enhance its accessibility. For example, a refreshable braille display is an assistive technology device that enables individuals who are both deaf and blind to use a PC. When connected to a PC, a refreshable braille display can work in conjunction with a compatible screen reader to provide tactile output in braille characters. Blind individuals who have been trained to read braille can run their fingers over the display to comprehend the information presented on the PC.

Many assistive technology devices utilize USB technology for connectivity. Most Lenovo PCs are equipped with at least one USB connector that adheres to the relevant USB specifications and is backward compatible. A Lenovo PC may feature a USB Standard-A connector, a USB Type-C connector, or both. If the plug type of the assistive technology device does not match the USB connector on your PC, you can easily purchase and use a USB adapter to resolve the issue.

Keyboard accessibility

The keyboard serves as the primary input device for many PC users. Lenovo keyboards, whether integrated or supplied separately with the PC, are designed and manufactured with accessibility in mind. This section highlights the accessibility features of Lenovo keyboards that benefit all users, including those with disabilities.

keyboard layout

The alphabetic keys on a Lenovo keyboard are arranged in a QWERTY layout, which is standard for input devices featuring alphabetic keys. The F and J keys have bumps that make them tactilely distinguishable from other keys. This feature serves as an orientation aid for skilled typists, allowing them to rest their index fingers without looking at the keys. Some Lenovo keyboards include a separate numeric keypad. The numeric keys are organized in four rows and three columns, arranging in ascending order from left to right and bottom to top. Additionally, the 5 key features a bump to make it tactilely distinguishable.

Standard modifier keys

Lenovo keyboards are equipped with standard modifier keys for PCs, including:

the alt key

the ctrl key the shift key the Windows logo key

These keys are extensively used as the modifier key for shortcuts by the operating system and other applications.

The tab key

The tab key is located in the leftmost column of the keyboard. For operating systems, applications, and web documents that are designed with accessibility in mind, users can press the tab key and alt + tab (in reverse order) to cycle through the interactive elements.

Hotkeys

Many Lenovo keyboards feature hotkeys in the top row, offering convenient access to frequently used settings.

The fn key and the fnlock

The fn key is a Lenovo-defined modifier key. It can be used with the top-row dual-function keys to switch their functionalities. It can also be used with several other keys to access Lenovo defined settings.

The fnlock is a switch that can be turned on and off by pressing fn + esc. Instead of holding down the fn key to switch the functionality of dual-functionkeys, you can turn on fnlock. This feature allows users to access both hotkey and function key functionalities without the need to press two keys simultaneously.

Keyboard backlight

Many Lenovo keyboards are equipped with backlights to help you use the keyboard in dark lighting conditions. The backlights can be controlled by pressing fn + Space.

Biometric devices

Some Lenovo PCs are equipped with biometric devices that facilitate easy and secure identity authentication. If your PC includes an IR LED and an IR camera, you can enable facial recognition in Windows 11. Additionally, you can use your fingerprint for authentication on PCs with a fingerprint reader. Biometric identity authentication can be particularly beneficial for users who find it difficult typing passwords.

Note: When biometric devices are used for device authentication, they are not the only available method for this purpose. If biometric authentication fails, you can use a password or PIN to sign in to Windows.

Accessibility features of Windows 11

An operating system is a crucial piece of software installed on a PC. It plays a vital role in the PC's basic functionality by providing a user interface, various tools for system management, and a foundation upon which additional specialized applications can be installed.

Microsoft's Windows 11 is a modern operating system that comes preinstalled on many Lenovo PCs. It offers a rich set of accessibility features designed for individuals with diverse disabilities. This section outlines the accessibility features available in Windows 11, explains how to activate them, and discusses the benefits they provide.

Notes: The following accessibility features of Windows have been tested and confirmed to deliver their essential functionalities on Lenovo PCs that come pre-installed with Windows 11.

Narrator

Magnifier

Configuring accessibility features in the Settings app

Windows 11 provides a centralized location within the Settings app for activating and configuring all accessibility features. You can access this section by selecting **Start** → **Settings** → **Accessibility**. Additionally, the keyboard shortcut Windows logo key + U provides quick access to this interface.

Narrator

Narrator is Windows 11's built-in screen-reading application. It can read screen content aloud to users and also accept input from the keyboard, enabling individuals with visual impairments to navigate effectively within Windows 11, use applications, and browse the web.

Start and stop Narrator

You can start and stop Narrator by selecting the toggle button for Narrator in the centralized Accessibility section of the Settings app. Additionally, the keyboard shortcut Windows logo key + ctrl + enter provides quick access to both the start and stop functions.

Customize Narrator

Narrator offers a variety of controls that allow you to customize it to suit your preferences. For example, you can install additional text-to-speech voices and select your preferred voice for Narrator. You also have the option to adjust the verbosity level to choose the type of content to be read. All Narrator settings are conveniently located in the centralized Accessibility section of the Settings app. Additionally, the keyboard shortcut Windows logo key + ctrl + N offers quick access to these settings.

Adjusting text sizes, applying a high-contrast theme, and using Magnifier

For individuals who find it difficult to see text clearly on the screen, Windows offers the options of adjusting text sizes, applying a high-contrast theme, and using Magnifier.

Adjust text sizes

If you find the text on the screen is too small to read, you can scale up the size of text displayed by Windows and other applications.

- Step 1. Select Start → Settings → Accessibility → Text size.
- Step 2. Use the slider and the preview pane to select a size that fits your need and then select **Apply**.

Apply a high-contrast theme

For individuals with low vision, Windows 11 offers contrast themes that enhance text readability by using a background color that sharply contrasts with the text.

- Step 1. Select Start → Settings → Accessibility → Contrast themes.
- Step 2. In the dropdown list for **Contrast themes**, select one option and then select **Apply**.

To exit a contrast theme, select **None** from the dropdown list. The keyboard shortcut for turning on and off contrast theme is left alt + left shift + prt sc.

Enable Magnifier

You can enable Windows 11 Magnifier to enlarge specific areas or the entire screen, making text and images easier to see.

Step 1. Select Start → Settings → Accessibility → Magnifier.

Step 2. Select the toggle to enable or disable Magnifier.

The keyboard shortcuts for enabling and disabling Magnifier are Windows logo key + Plus sign (+) and Windows logo key + esc, respectively. When Magnifier is enabled, you can use Windows logo key + plus sign (+) and minus sign (-) to zoom in and zoom out.

Sticky Keys

Microsoft Windows offers numerous keyboard shortcuts that require users to hold down a modifier key (such as shift, ctrl, alt, or the Windows logo key) before pressing one or more additional keys. While these shortcuts provide significant convenience for many users, they can pose accessibility challenges for individuals who have difficulty holding down multiple keys at the same time.

Sticky Keys is an accessibility feature in Windows that, when enabled, allows users to press keys in sequence to activate shortcut functions. For example, instead of holding down the ctrl key and the C key simultaneously, users can press each key individually to copy text to the clipboard.

To enable Sticky Keys, press the shift key five times in guick succession. When the confirmation dialog box appears, select Yes to disable Sticky Keys, press the shift key five times again and choose No when prompted.

Accessible user documentation

Documentation containing instructions for the use of the product, including its accessibility features, is available in accessible formats (such as HTML and PDF) on the Lenovo Support Website. When creating documentation, a series of industry standards and best practices are followed to ensure that the content is useful to as broad an audience as possible. Additionally, automated testing tools are employed to identify issues that may hinder the accessibility of information. These issues are addressed to the extent permitted by commonly available technologies.

Accessibility features of user documentation

By adhering to industry standards and best practices, Lenovo documentation offers numerous features that facilitate the perception and understanding of the content. Additionally, several of these features are specifically designed to ensure that users of assistive technology devices can access information comparable to that available to those who do not rely on such devices.

Perceivable content

Text content is presented using popular and easy-to-read fonts. Text colors are in high contrast with the background. Non-text elements, such as graphics and videos that convey important information, are accompanied by alternative text descriptions. Users with visual impairments can utilize screen readers to access information comparable to that available to sighted users.

Understandable content

The documentation is presented visually in a well-structured and simple layout. It also includes hidden tags or other markup information that store the content's structure, which can be utilized programmatically by assistive technologies to convey this structure to users.

Operable content

Documentation includes industry-standard tags for sectioning and interactive elements, such as titles, headings, various structural components, links, buttons, and input fields. Screen reader users can utilize standard modifier keys on the keyboard to effectively navigate and interact with the documentation.

Testing documentation accessibility

Before being officially released, Lenovo documentation undergoes testing with automated tools to evaluate its accessibility. HTML documents are assessed for compliance with the success criteria outlined in the Web Content Accessibility Guidelines (WCAG), a widely accepted set of standards designed to enhance web document accessibility. PDF documents are evaluated for accessibility using the accessibility checker in Adobe Acrobat for the same purpose. Automated testing tools help identify elements within a document that may present challenges when rendered by screen readers and other assistive technology devices. Accessibility issues identified by these automated tools are subsequently analyzed manually and corrected as needed.

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