

# ThinkSmart One Deployment Guide and User Guide for Microsoft Teams Rooms (MTR)

**ThinkSmart**



**Lenovo**

## **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*
- Other documents in the box

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## About this documentation

- Illustrations in this documentation might look different from your product.
- Documentation content is subject to change without notice. To get the latest documentation, go to <https://smartsupport.lenovo.com/>.
- Microsoft® makes periodic feature changes to the Windows® operating system through Windows Update. Refer to Microsoft resources for the latest information.



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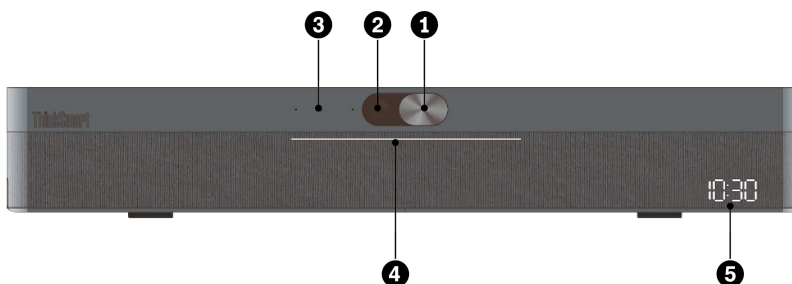
## Chapter 1. Meet ThinkSmart One

Thanks for choosing ThinkSmart One.

ThinkSmart One is the first Windows-based all-in-one bar on the market. It combines the high-resolution camera with wide field of view, premium sound and powerful compute running Microsoft Windows. End users will enjoy the familiar Microsoft Teams Rooms (referred to as MTR) interface and IT administrators will enjoy the easily deployed and managed Windows system.

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### Front

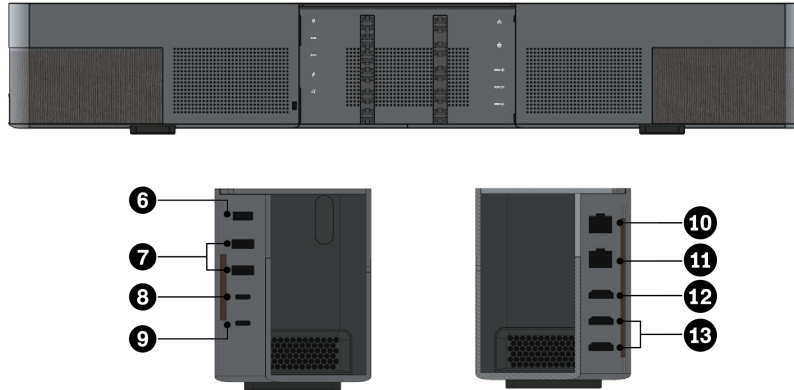


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<b>1. Camera cover slider</b>	Move the slider to cover or uncover the camera lens.
<b>2. Camera</b>	Use for video conference.
<b>3. Camera status indicator</b>	Show the camera status of your device. <ul style="list-style-type: none"><li>• <b>On:</b> The camera is working for a video conference.</li><li>• <b>Off:</b> The camera is off.</li></ul>
<b>4. Power indicator</b>	Show the system status of your device. <ul style="list-style-type: none"><li>• <b>Solid white:</b> The device is powered on and not in meeting.</li><li>• <b>Solid green:</b> The device is in a meeting or in a call.</li><li>• <b>Solid red:</b> The device is muted.</li><li>• <b>Blinking green:</b> A call is on hold.</li><li>• <b>Green dot flowing from both sides to center:</b> There is an incoming call.</li></ul>
<b>5. System clock</b>	Show the system time.

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## Rear

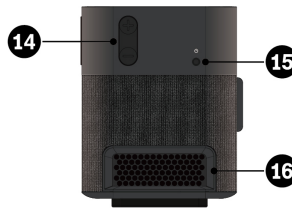


<b>6. Power connector</b>	Connect to a power supply.
<b>7. USB 3.2 connector Gen 1</b>	Connect a USB-compatible device, such as a USB keyboard or USB mouse.
<b>8. USB-C™ connector (USB 3.2 Gen 1)</b>	Connect USB-C compatible devices.
<b>9. USB-C connector (USB 2.0)</b>	Connect to ThinkSmart Controller only.
<b>10. Ethernet connector</b>	Connect to a local area network (LAN).
<b>11. Ethernet connector</b>	Connect to a local area network (LAN). This connector will be enabled with Power over Ethernet (PoE) for selected models.
<b>12. HDMI-in connector</b>	Connect to your computer only. Do not connect an external HDMI™ display to this connector.
<b>13. HDMI-out connector</b>	Connect to an external HDMI display. This HDMI 1.4 connector supports display resolutions up to 3840 x 2160 pixels, 30 Hz.



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## Right



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<b>14. Volume button</b>	Adjust volume.
<b>15. Power button</b>	Switch between Operation mode and Non-operation mode. <ul style="list-style-type: none"><li>• Press to enter Operation mode. In this mode, ThinkSmart One is ready for meeting.</li><li>• Press for 4 seconds to enter Non-operation mode. In this mode, the system clock is working while the system running has stopped.</li></ul>
<b>16. Ventilation holes (out)</b>	Maintain the outgoing airflow to dissipate internal heat.

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## 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.

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<b>USB device</b>	<b>Data rate (Gbit/s)</b>
3.2 Gen 2 / 3.1 Gen 2	10

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## Specifications

### ThinkSmart Controller\*

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<b>Dimensions</b>	<ul style="list-style-type: none"><li>• Width: 265.5 mm (10.5 inches)</li><li>• Height: 168.1 mm (6.6 inches)</li><li>• Depth: 13 mm (0.5 inches) , 83.3 mm (3.3 inches) with the stand</li></ul>
<b>Weight (without packaging)</b>	Maximum configuration as shipped: 753.8 g (1.7 lb)

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### ThinkSmart One

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<b>Dimensions</b>	<ul style="list-style-type: none"><li>• Width: 700 mm (27.5 inches)</li><li>• Height: 113 mm (4.4 inches)</li><li>• Depth: 89 mm (3.5 inches)</li></ul>
<b>Weight (without packaging)</b>	Maximum configuration as shipped: 3.7 kg (8.15 lb)
<b>Hardware configuration</b>	<ol style="list-style-type: none"><li>1. Right-click <b>Start</b> to open the Start context menu.</li><li>2. Click <b>Device Manager</b>.</li></ol>
<b>Power supply</b>	135-watt automatic voltage-sensing power supply
<b>Electrical input</b>	<ul style="list-style-type: none"><li>• Input voltage: From 100 V ac to 240 V ac</li><li>• Input frequency: 50/60 Hz</li></ul>
<b>Microprocessor</b>	To view the microprocessor information, right-click <b>Start</b> and then click <b>System</b> .
<b>Storage device</b>	M.2 solid-state drive
<b>Network features</b>	<ul style="list-style-type: none"><li>• Ethernet LAN</li><li>• Wireless LAN (not recommended)</li></ul>
<b>Operating system</b>	Windows 10 IoT Enterprise SAC 64 bit
<b>Preloaded Lenovo apps</b>	ThinkSmart Manager Service*
<b>Preloaded non-Lenovo apps</b>	Microsoft Teams Rooms

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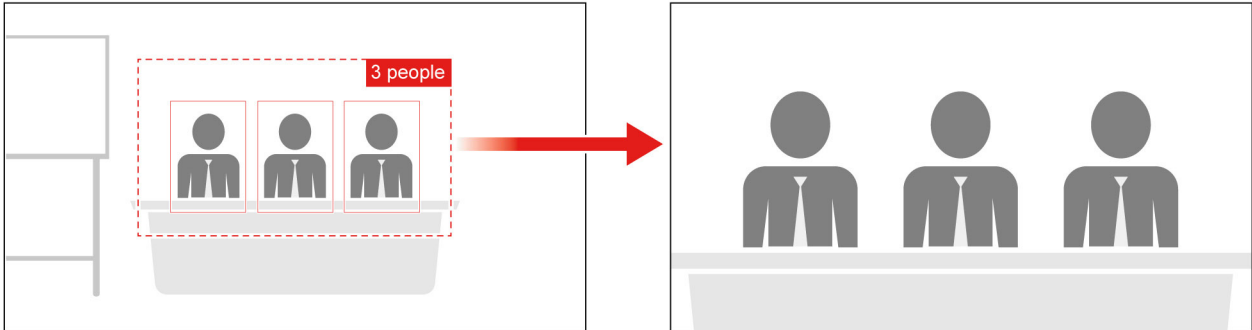
\* for selected models

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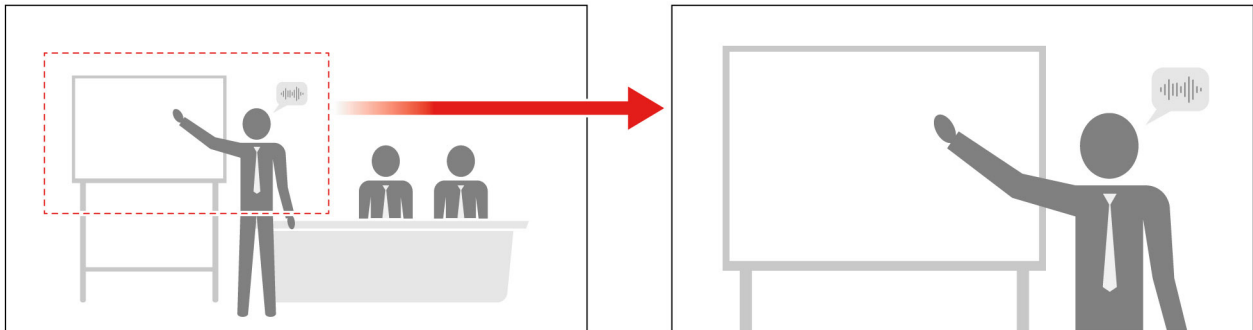
## Smart features

### Camera Artificial Intelligent (AI) features

- **People count and auto zoom/frame:** Auto detect and count the people in the field of view. Then auto frame and zoom in the people to a suitable size. This function makes it easier to monitor the dynamics of the conference.



- **Speaker tracking and whiteboard recognition:** Auto track the speaker and count the whiteboard nearby as a person. Then auto frame and zoom in the speaker and the whiteboard to a suitable size. The camera will use Picture-in-Picture mode to replace the original video image in the sub image. This function makes the conference more focus on the speaker and the content of whiteboard.

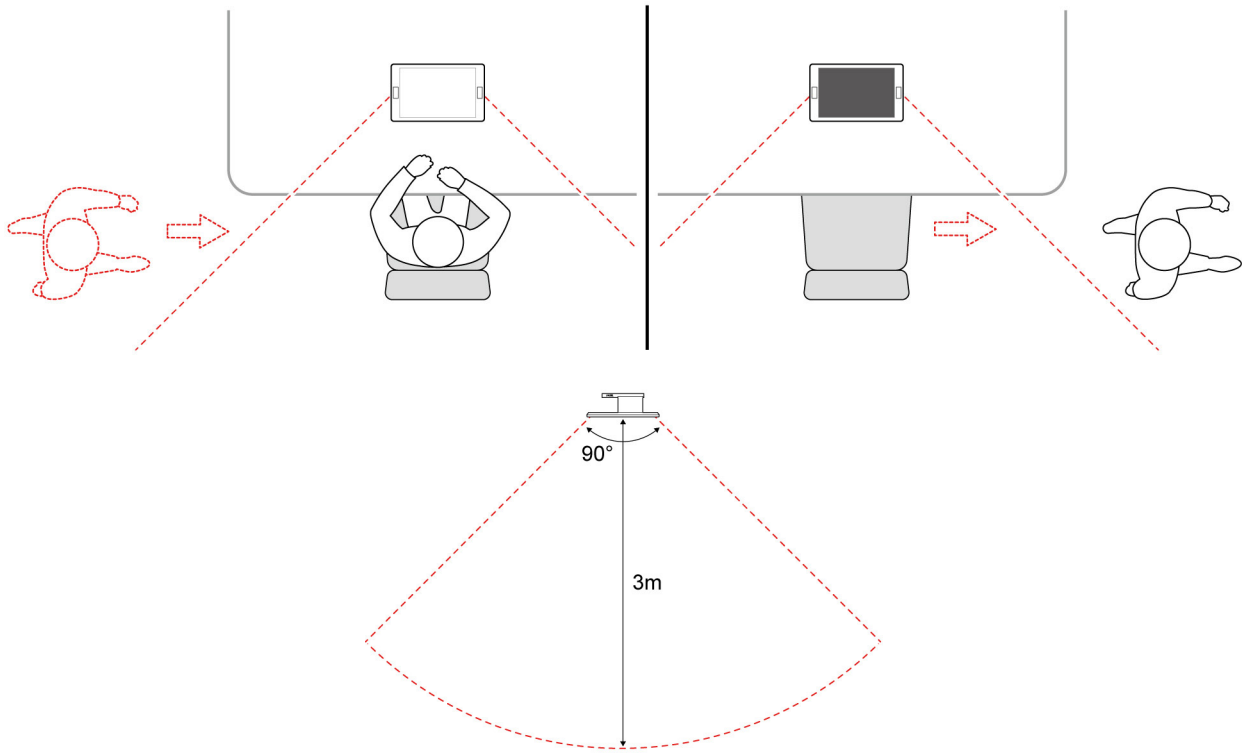


### Notes:

- The camera will run the speaker tracking function when the speaker speaks with normal sound volume (greater than 60dB) for over 2 seconds. The speaker should be less than 5 meters away from the camera.
- The camera will run the whiteboard recognition function when the speaker is nearby and speaks for over 2 seconds.
- The camera will zoom out to show all people in the field of view when the speaker stops speaking for over 3 seconds.
- The camera will run the auto zoom/frame function instead of the speaker tracking function when there are more than two speakers and their distance is too close (less than 50 cm).

## ThinkSmart Controller

**Motion detection:** Auto wake up the screen when a person approaches toward it. The detection angle is  $90^\circ$  and the detection distance is up to 3 meters.



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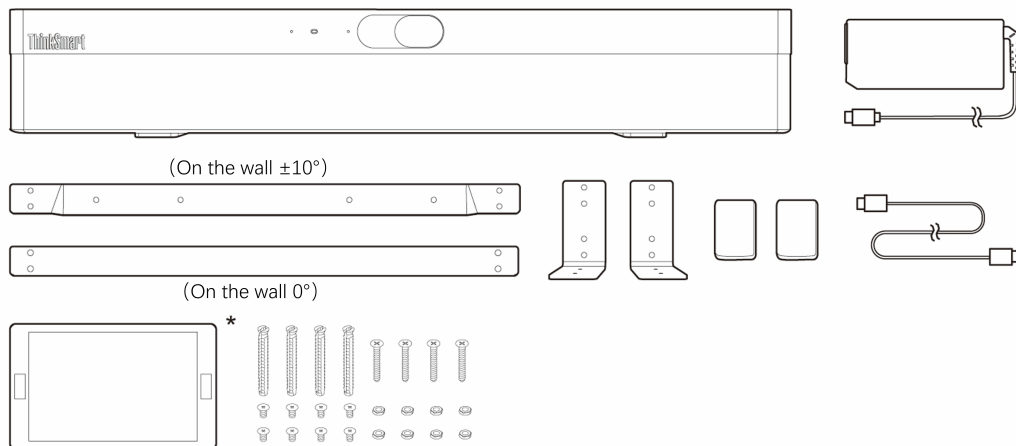
## Chapter 2. Prerequisites for deployment

The following are basic prerequisites for deployment. ThinkSmart One only works if the proper infrastructures are deployed. Please consult your sales representative for related prerequisites.

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### Hardware

- At least one external display with cable for HDMI-out connection
- Keyboard and mouse
- RJ45 Ethernet cable
- HDMI cable for HDMI-in connection
- In-box items



You can purchase accessories from Lenovo <https://www.lenovo.com/accessories>.

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### Software

- Get an Office 365 license.
- Get an MTR account and password.

For more information, go to <https://docs.microsoft.com/en-us/microsoftteams/rooms/>.

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### Network

Firewall	Scenario
TCP 443	Signaling packets
TCP 443 UDP 3478 TCP / UDP 50,000 - 59,999	Audio / Video packets

Firewall	Scenario
TCP 443 TCP / UDP 50,000 - 59,999	Desktop sharing
TCP 80 and 443	Http / https

Bandwidth (up/down)	Scenario
30 kbps	Peer-to-peer audio calling
130 kbps	Peer-to-peer audio calling and screen sharing
500 kbps	Peer-to-peer quality video calling 360 p at 30 fps
1.2 Mbps	Peer-to-peer HD quality video calling with resolution of HD 720 p at 30 fps
1.5 Mbps	Peer-to-peer HD quality video calling with resolution of HD 1080 p at 30 fps
500 kbps / 1 Mbps	Group Video calling
1 Mbps / 2 Mbps	HD Group video calling (540 p videos on 1080 p screen)

For more information, go to <https://docs.microsoft.com/en-us/microsoftteams/rooms/>.

## Deploy and Maintain Services

A deploy, and maintain service is included with the ThinkSmart one. Go to <https://lenovosmartofficeservices.com> and schedule for professional support.

- **Deploy:** A ThinkSmart service to help set up, configure and integrate collaboration solution devices into your environment. All deployments include full documentation reports after complete.
- **Maintain:** A one-year (renewable) maintenance contract where technicians will assist with updates and device changes and provide easy to follow Do's and Don'ts. Device operability health check will ensure collaboration solution is healthy and running smoothly. Redeployment of solution, if required, into a different meeting space is included.

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## Chapter 3. Hardware deployment

ThinkSmart One supports multiple mounting angles on the wall or on the desk to meet various conference needs. The field of view of the camera varies by the installation angle on the wall. IT administrators can deploy them according to the actual situations.

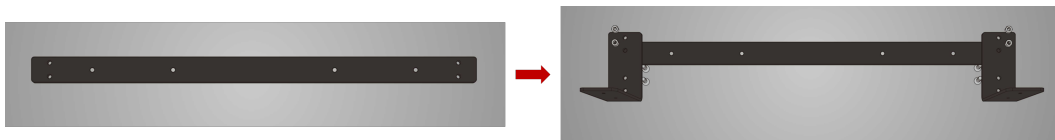
**Note:** The device shall be installed within in two metres above ground.

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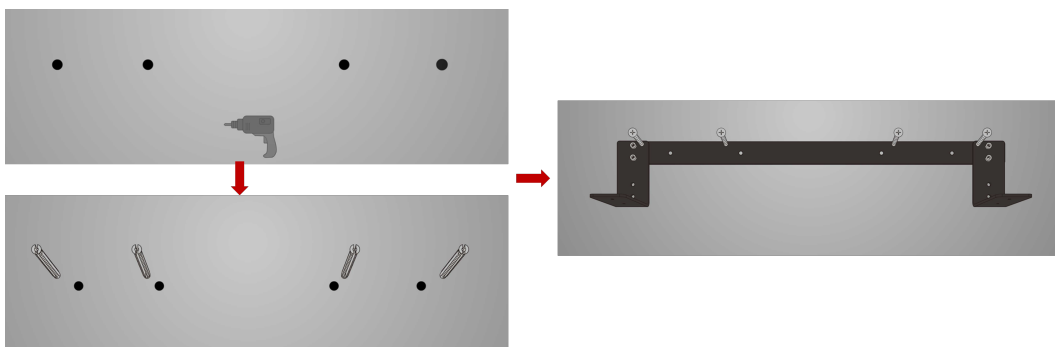
### Install ThinkSmart One

- **Install on the wall (0°)**

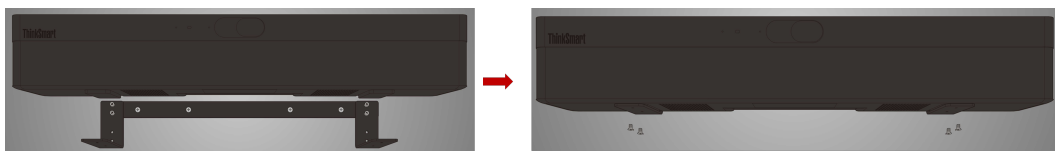
Step 1. Mount two L brackets to the horizontal bracket.



Step 2. Drill and mount the combined bracket to the wall.



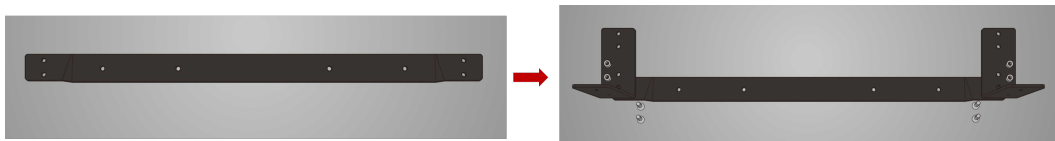
Step 3. Fix ThinkSmart One to the bracket with screws in the bottom.



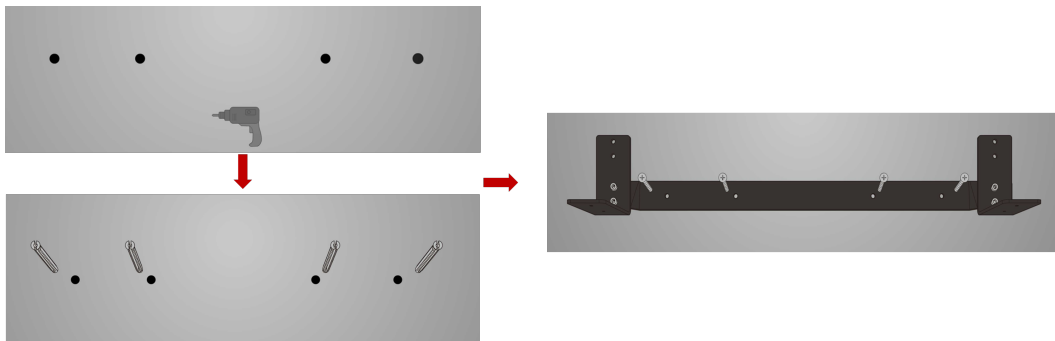
- **Install on the wall (10°)**

ThinkSmart One is slightly upward by 10 degrees. Recommended if you plan to install the device in a lower place.

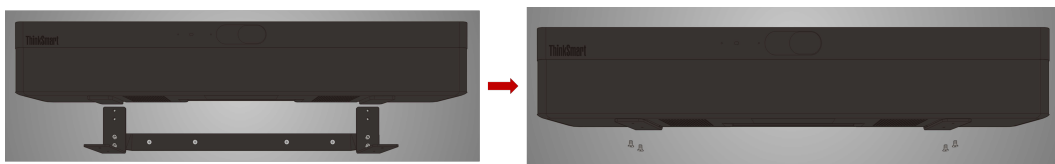
Step 1. Mount two L brackets to the lower holes of horizontal bracket.



Step 2. Drill and mount the combined bracket to the wall.



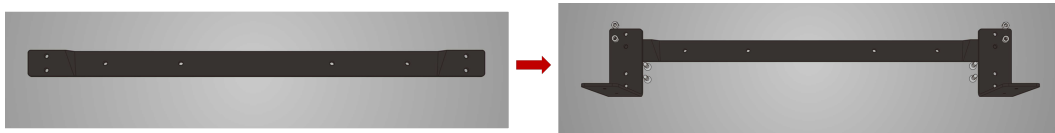
Step 3. Fix ThinkSmart One to the bracket with screws in the bottom.



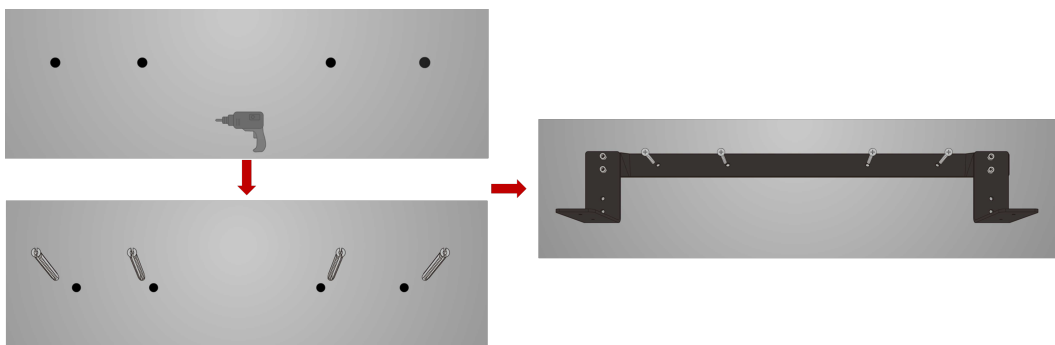
- **Install on the wall (-10°)**

ThinkSmart one slightly faces downwards. Recommended if you plan to install it higher (no more than 2 metres above the ground).

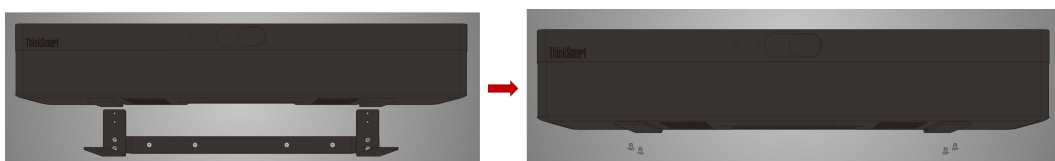
Step 1. Mount two L brackets to the horizontal bracket.



Step 2. Drill and mount the combined bracket to the wall.



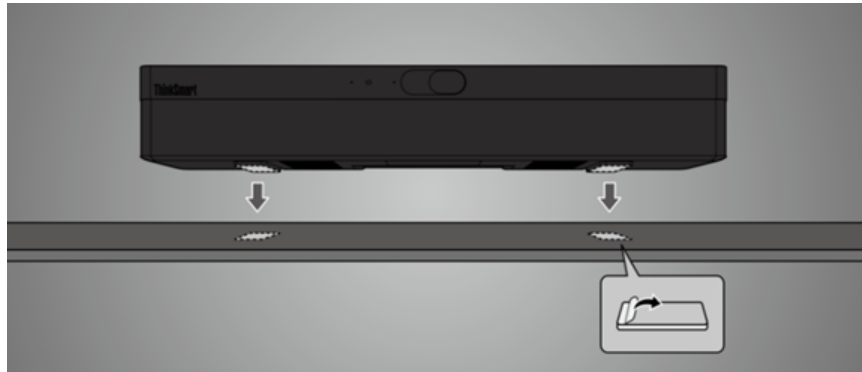
Step 3. Fix ThinkSmart One to the bracket with screws in the bottom.





- **Install on the table**

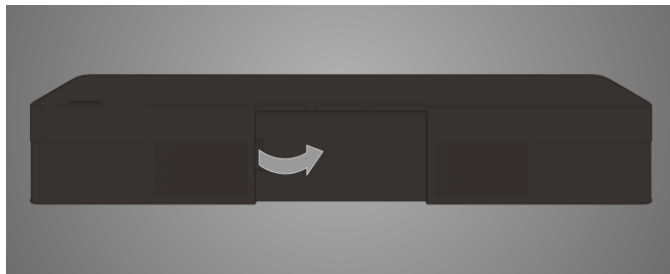
Follow the steps in the illustration.





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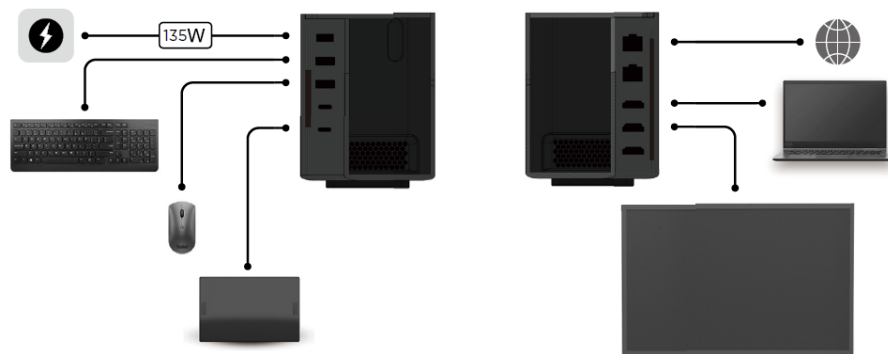
## Connect devices to ThinkSmart One

1. Open the connector door.



2. Connect a keyboard, a mouse, Controller, an external display, an Ethernet cable, the power adapter and power cord, and your computer to ThinkSmart One.

**Note:** Ensure you connect your computer to the HDMI-in connector (HDMI ) and connect the external displays to the HDMI-out connectors (HDMI )



3. Press the power button on the left and turn on the device.



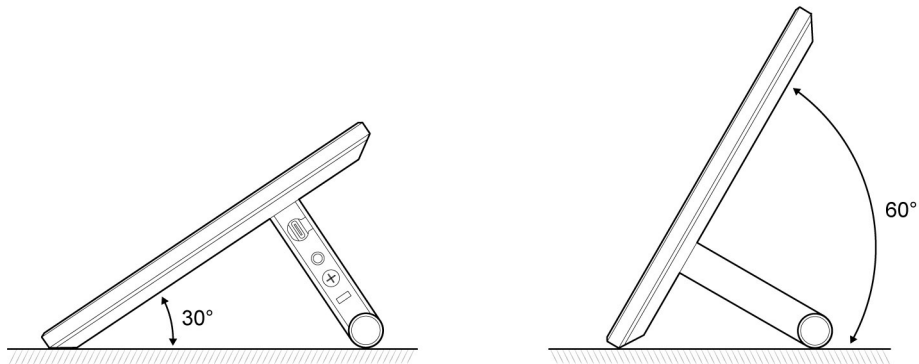
4. Use the keyboard and mouse to complete the following software deployment:
  - “Configure Windows” on page 13
  - “Claim to ThinkSmart Manager” on page 15
5. Close the connector door.

---

## ThinkSmart Controller

1. Place Controller on a table in either 30° or 60° position.

**Note:** Its screen will rotate automatically.



2. Lock Controller to a table or other fixture through a cable lock compliant with Kensington / Lenovo NanoSaver lock standard (using Cleat locking technology). The security-lock slot is located in the Controller stand.

**Note:** You are responsible for evaluating, selecting, and implementing the locking device and security feature. Lenovo makes no comments, judgments, or warranties about the function, quality, or performance of the locking device and security feature. You can purchase locks from Lenovo.

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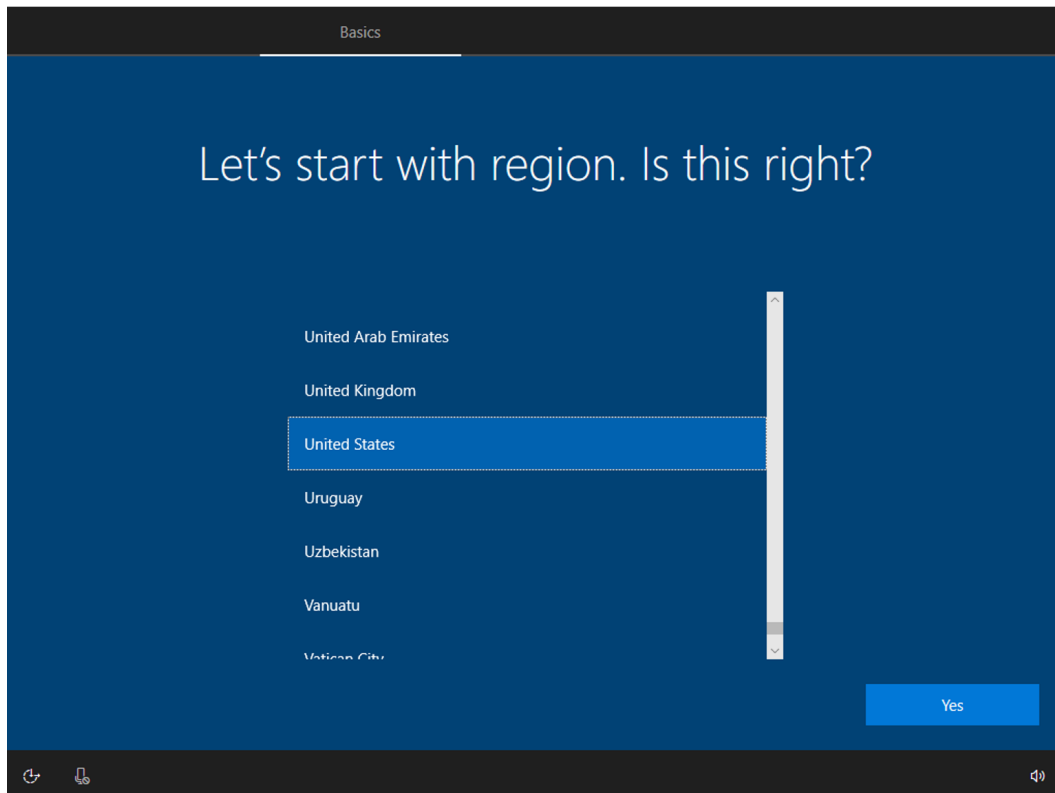
## Chapter 4. Software deployment

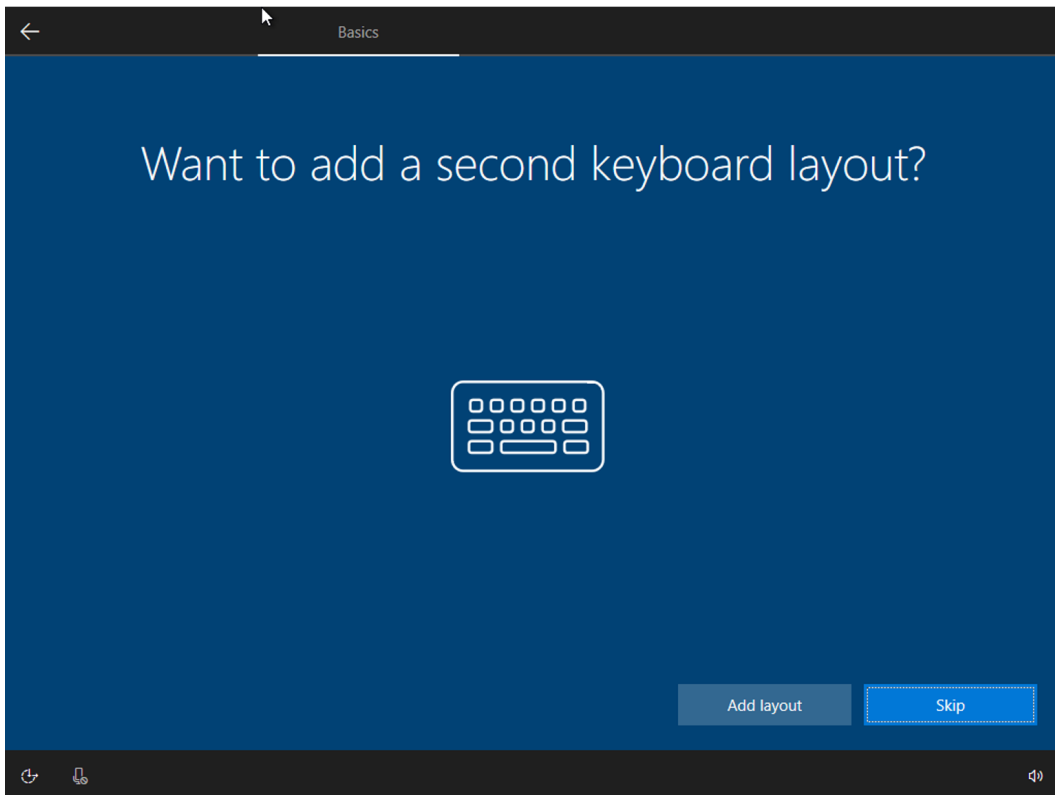
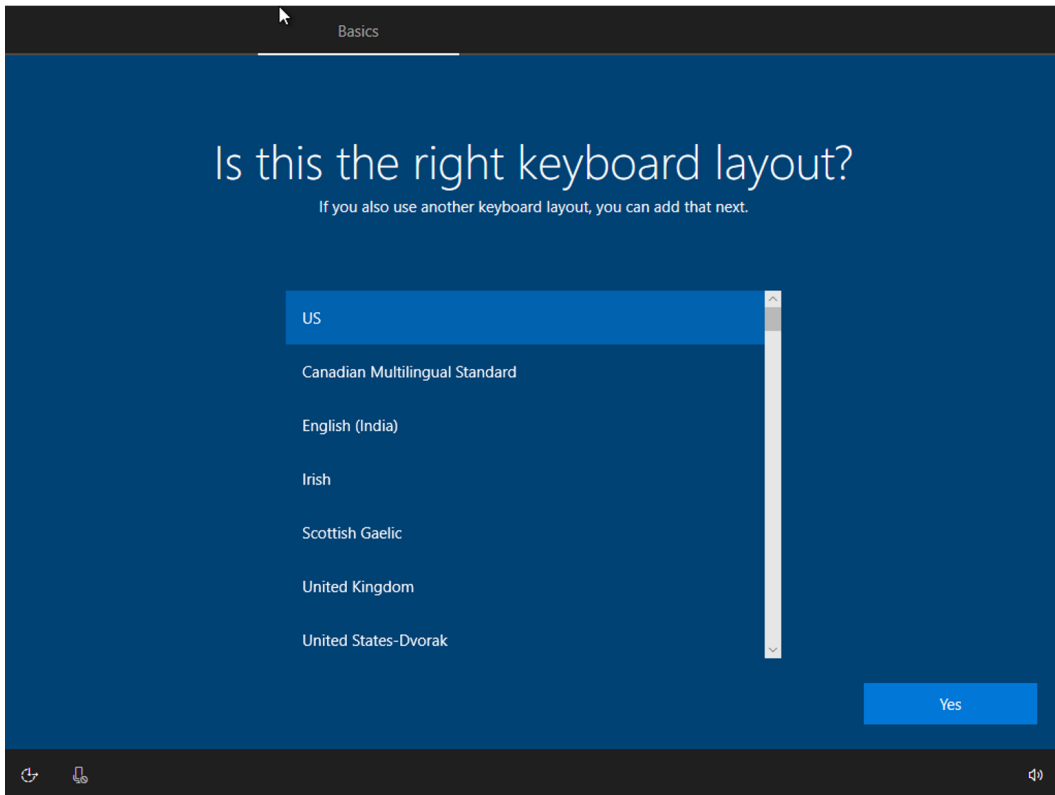
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### Configure Windows

When you turn on ThinkSmart One for the first time, you will see the Windows Out of Box Experience (OOBE). Follow on-screen instructions to set the region and keyboard language.

**Note:** It is working as designed to show the OOBE window on the external display rather than ThinkSmart Controller. Please complete the settings with your keyboard and mouse.





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## Claim to ThinkSmart Manager

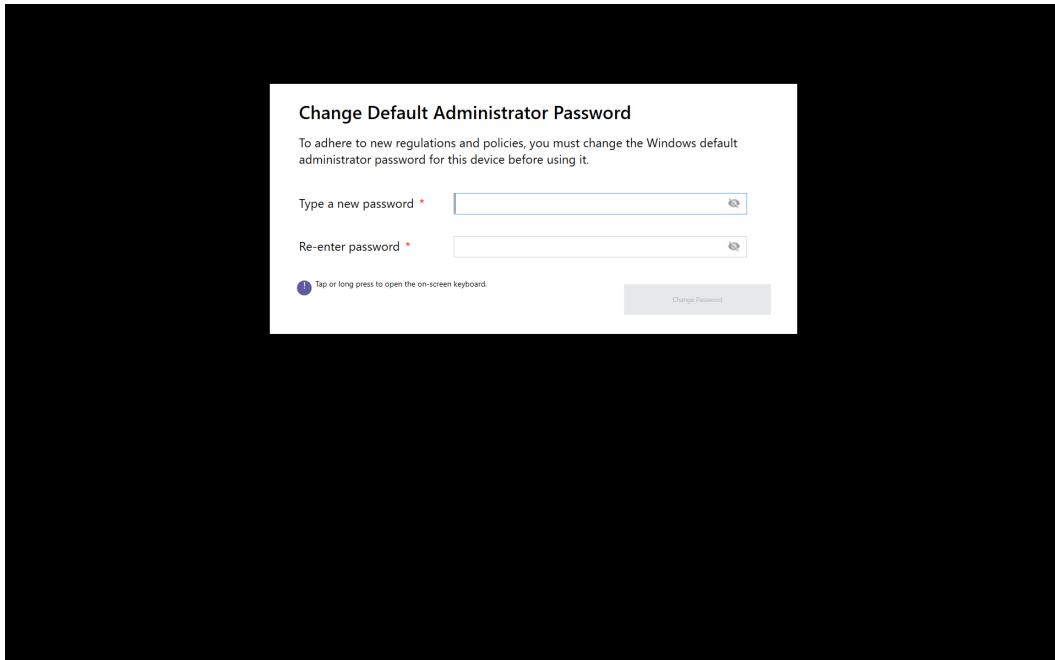
ThinkSmart Manager is a cloud management console designed for Lenovo smart devices, including ThinkSmart One. IT administrators can claim ThinkSmart One to ThinkSmart Manager so as to add, configure, and manage ThinkSmart One and attached peripherals from cloud.

After the Windows OOBE settings are completed, wait several minutes until the Claim Device to ThinkSmart Manager window is displayed. Then you can claim ThinkSmart One through the QR code or the PIN code. After claiming, a new Windows administrator password will be generated by ThinkSmart Manager automatically. See the following sections for details.

**Note:** ThinkSmart Controller touch screen is ready for use now. However, for optimal performance, it is recommended to use the keyboard and mouse to complete the claiming process.

It is recommended that you claim now. However, if you want to claim later, you can:

1. Select **Skip for now** on the Claim Device to ThinkSmart Manager window. The Change Default Administrator Password prompt will be displayed.
2. Set a new Windows administrator password and select **Change password** to complete the process.

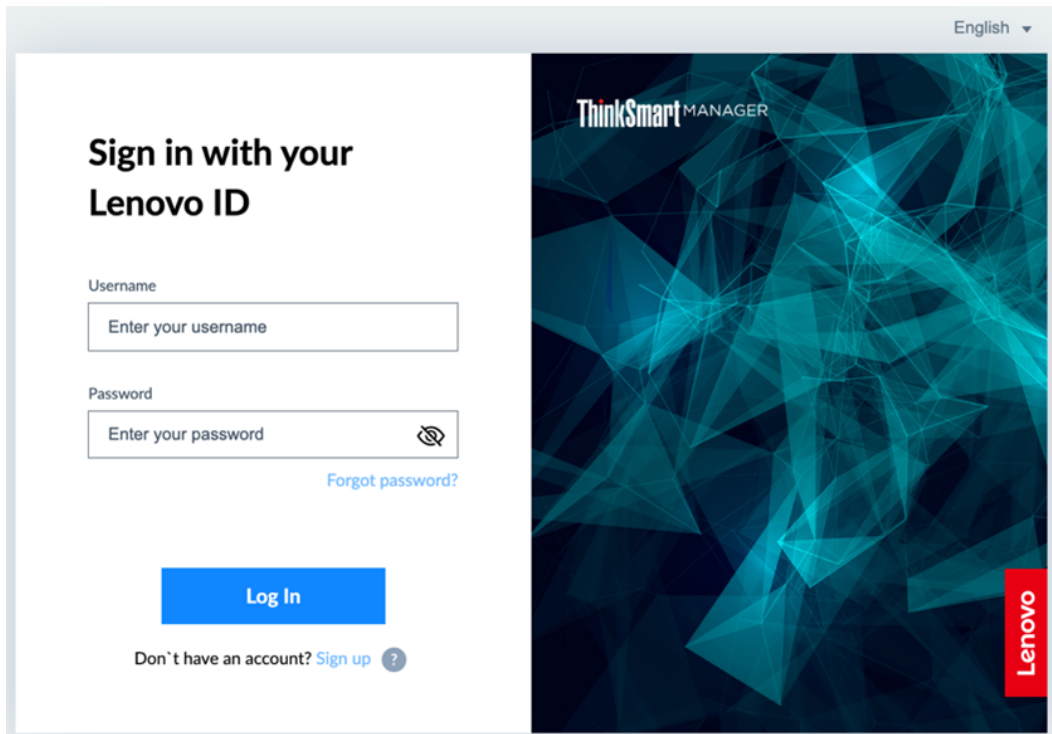


For information about claiming device after Windows OOBE, see *ThinkSmart Manager User Guide* at <https://support.lenovo.com/downloads/ds542392> to complete the claiming process.

## Before claiming

1. Go to <https://portal.thinksmart.lenovo.com/> and sign in to your organization. If your organization is not created yet, select **Create an Organization** and follow the on-screen instructions to create it. Ensure that you validate the e-mail that comes from Lenovo when you first create a Lenovo ID. Once you have validated using the link in the e-mail, you can try to log in to ThinkSmart Manager with your Lenovo ID.

**Important:** Do not use Lenovo ID's Social Sign-on feature (Facebook, Google, or Windows Live ID) for your ThinkSmart Manager. We recommend you use an e-mail address and password to ensure full functionality.



2. Log in with your Lenovo ID. If you do not have a Lenovo ID, select **Sign up** and follow the on-screen instructions to create it. Ensure that you validate the e-mail that comes from Lenovo when you first create a Lenovo ID. Once you have validated using the link in the e-mail, you can try to log in.

**Important:** Do not use Lenovo ID's Social Sign-on feature (Facebook, Google, or Windows Live ID) for your ThinkSmart Manager. We recommend you use an e-mail address and password to ensure full functionality.

3. Follow the on-screen instructions to create organization.


**Sign up for an Organization ID**

Enter a unique organization ID for your company's portal and select authentication type.

Organization ID <sup>?</sup>  Authentication Type

Progress bar on the right: Organization ID (selected), Create organization, Create your profile, Go to Portal. A red 'Lenovo' logo is on the far right.

4. After your organization is created, click **Go to Portal** and log in to your organization.

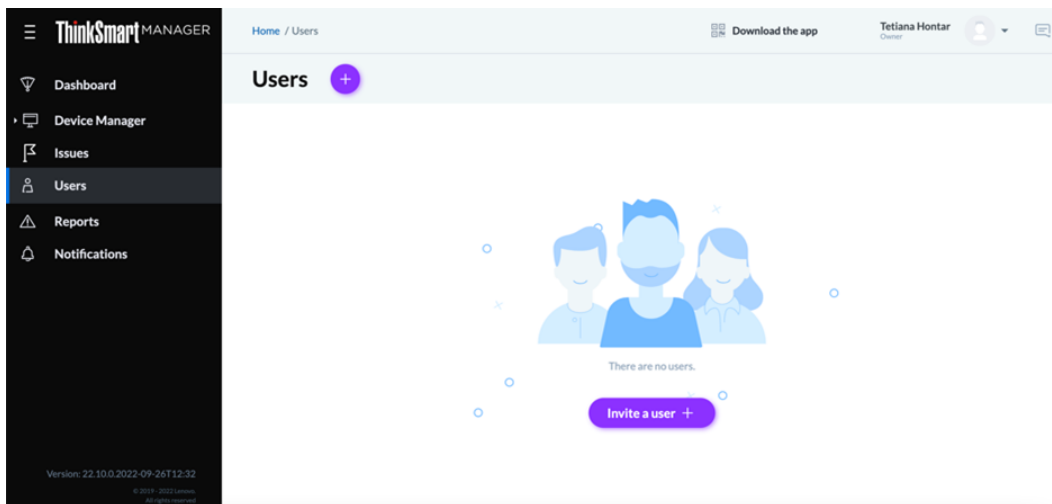


Your ThinkSmart Manager organization has been successfully created

You organisation URL is <https://portal.naea1.uds.lenovo.com/orname>  
We recommend you to bookmark this link for easier access

Progress bar on the right: Organization ID, Create organization (selected), Create your profile, Go to Portal. A red 'Lenovo' logo is on the far right.

5. The user who created the organization is known as an **Owner**. The **Owner** sends invites from within ThinkSmart Manager to people who need access in the organization.



## Claiming ways

There are 2 ways to claim a device to ThinkSmart Manager:

- Claim by the QR code or the PIN code from the ThinkSmart Manager application
- Claim by the PIN code from the ThinkSmart Manager Web site

The following sections show the claiming way from the ThinkSmart Manager application. For information about the other claiming way, see *ThinkSmart Manager User Guide* at <https://support.lenovo.com/downloads/ds542392>.

## Claiming from the ThinkSmart Manager application

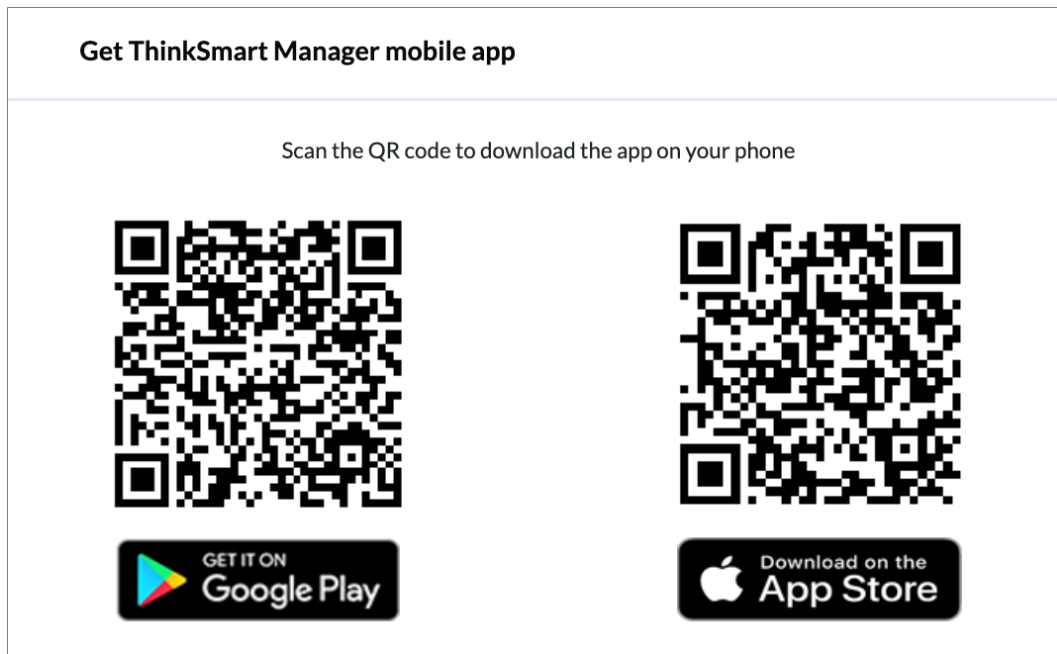
### Prerequisite

- Prepare a mobile device (such as smart phone) that can scan a QR code.
- Ensure that ThinkSmart One and the mobile device are connected to the Internet during the claiming process.

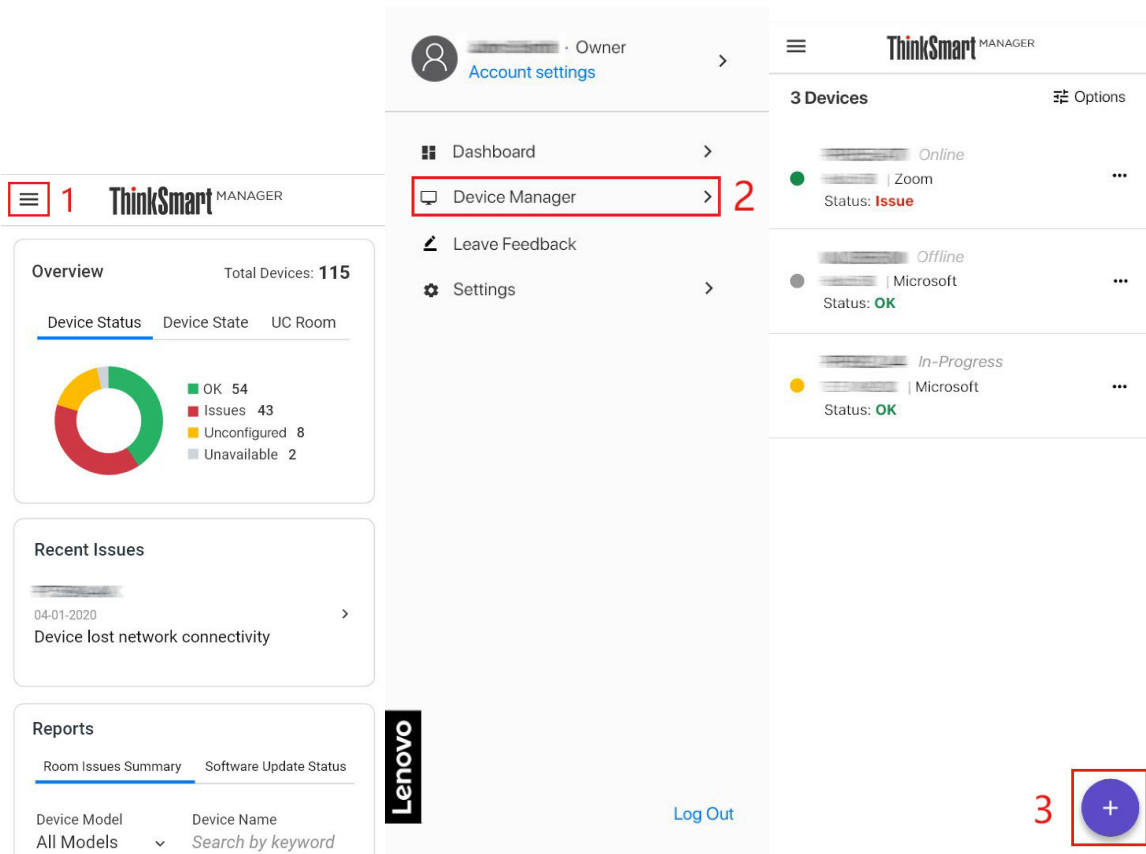
### Claiming steps



1. Use your mobile device to scan the QR code. Follow on-screen instructions to install the ThinkSmart Manager application and log in to your organization.

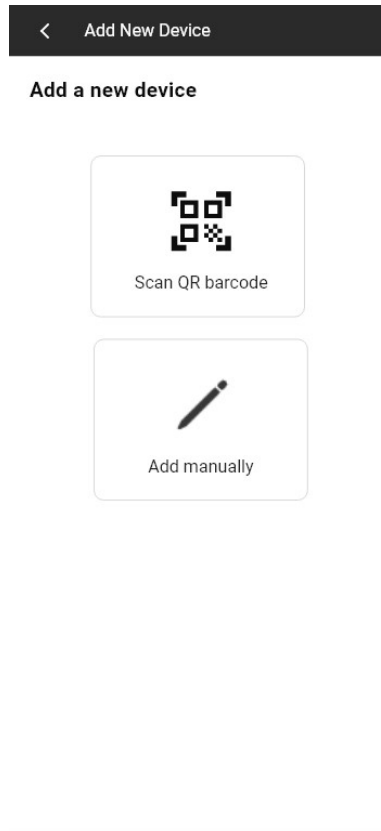


2. Complete the following operations on your mobile device.

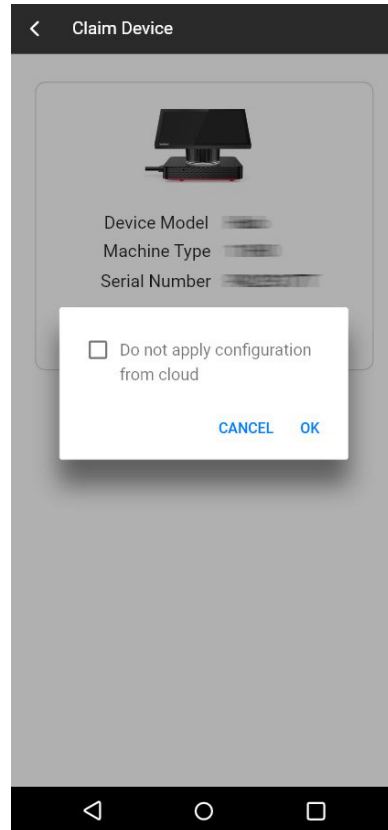


3. Add ThinkSmart One by one of the following:

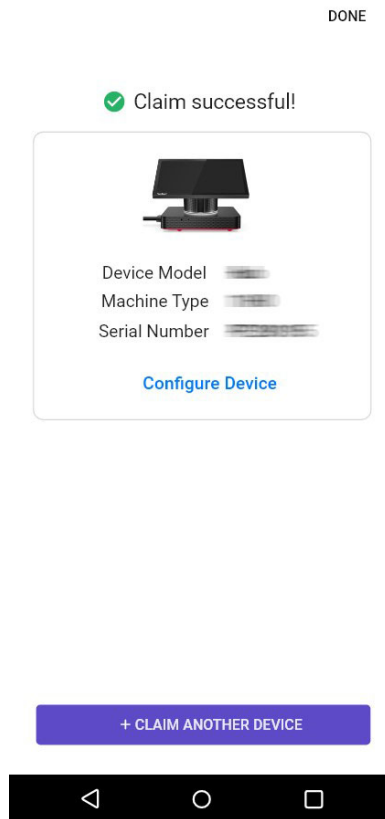
- **Scan QR barcode** (recommended): This QR code contains all the information required to add ThinkSmart One to ThinkSmart Manager. Once scanned, the application will add ThinkSmart One automatically.
- **Add manually**: Once selected, the application will guide you to select Machine Type and enter Serial Number and the PIN code to add ThinkSmart One manually.



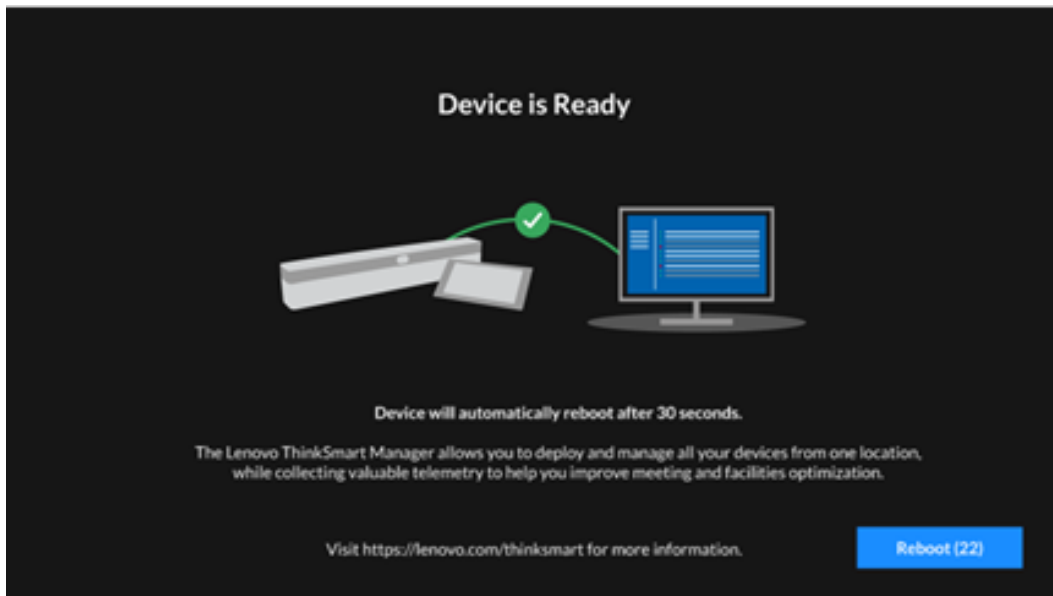
4. Select if you want to apply the default organization configurations to ThinkSmart One from cloud.
- Select it if you have configured ThinkSmart One locally and don't want to apply the default organization configurations.
  - Do not select it if you want to apply the default organization configurations.



5. The claiming is successful.



6. Follow the on-screen instructions to complete the claiming process.



### After claiming

You can view the administrator password from ThinkSmart Manager. You will need this password to enter the MTR Settings page or enter the administrator account.

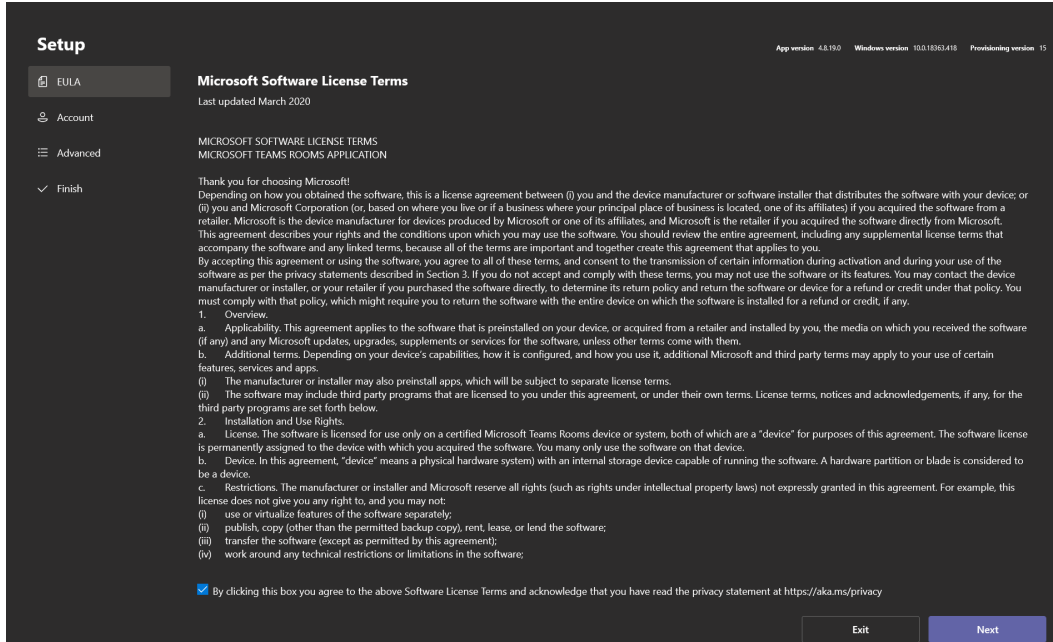
1. Go to <https://portal.thinksmart.lenovo.com/> and log in.
2. Select **Devices** on the left navigation panel. The Device List page is displayed.
3. Select the device you want to manage. The device information window is displayed.
4. Select **Configuration** → **Windows** on the right panel. Then, follow the on-screen instructions to view the administrator password.

For information about configuring and managing devices through ThinkSmart Manager, see *ThinkSmart Manager User Guide* at <https://support.lenovo.com/downloads/ds542392>.

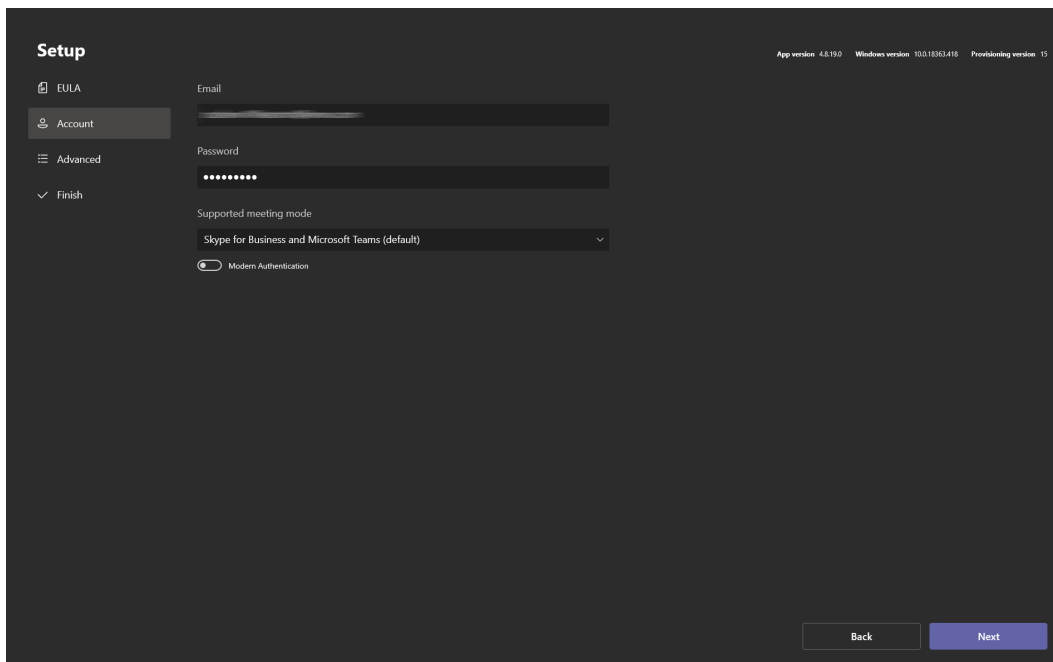
# MTR Setup

After the claiming is completed, wait several minutes until the MTR Setup window is displayed.

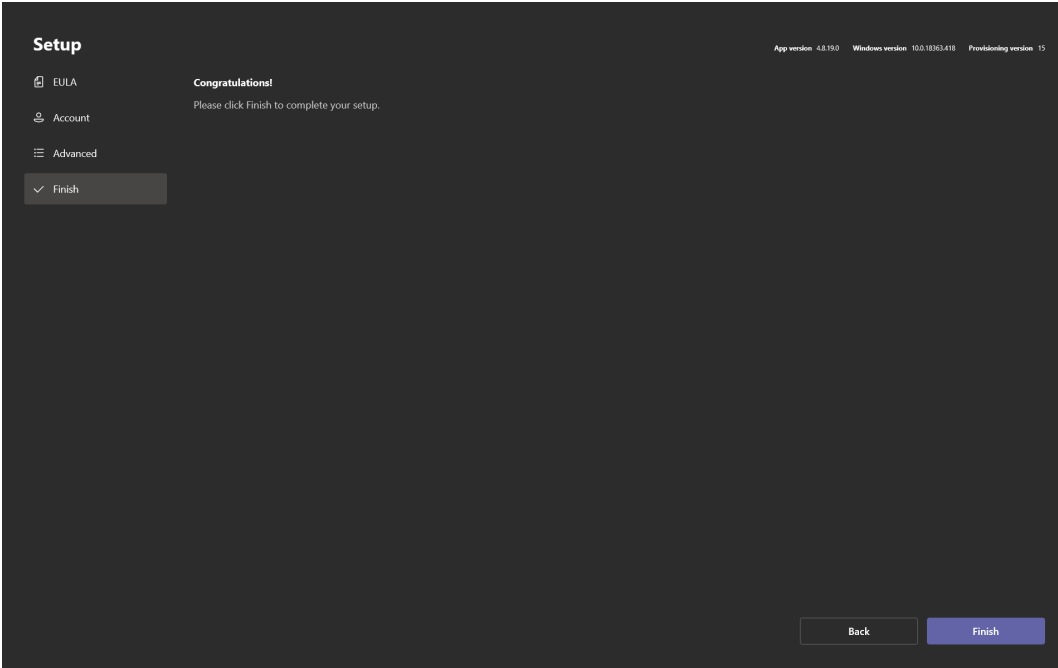
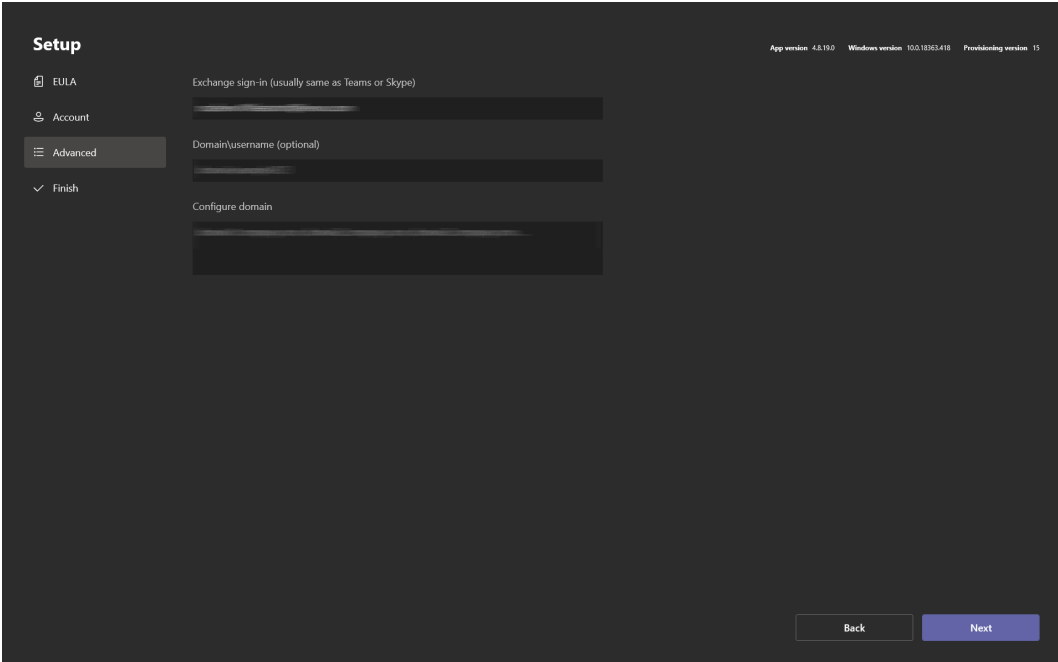
1. Select the box and select **Next**.



2. Enter an MTR account and password and select the desired meeting mode. Select **Next**.



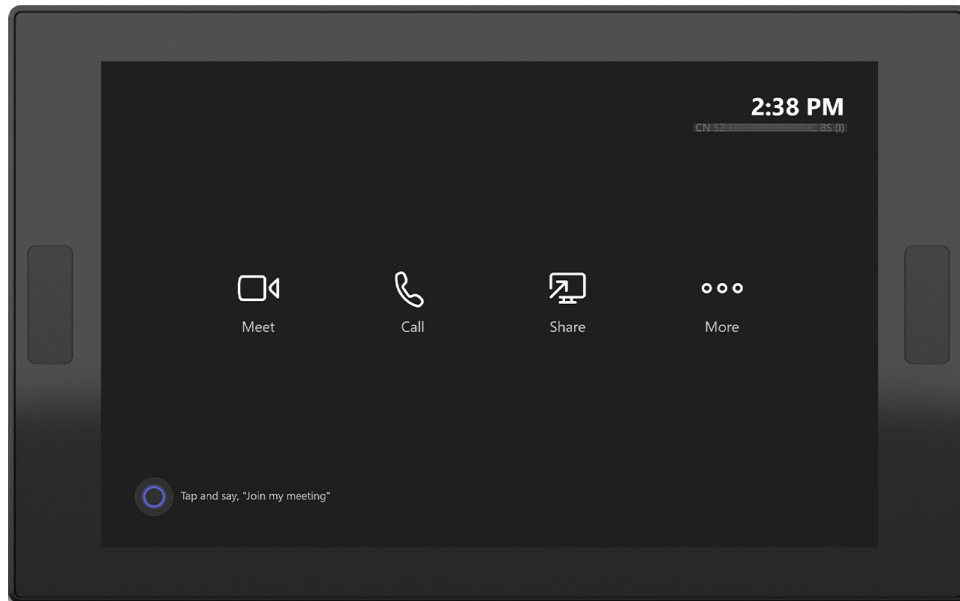
3. Select **Next** and **Finish** to complete the settings.



---

## MTR Settings

After the MTR Setup settings are completed, wait several minutes until the MTR home screen is displayed.



To access MTR Settings:

1. Select **More** → **Settings**.
2. Enter the Windows administrator password as prompted. The MTR Settings page will be displayed.

Then, you can configure the MTR settings and select **Save and exit** to save the settings. For example,

- From the Device tab, turn on **Dual monitor mode** to enable the two external displays connected to ThinkSmart One.

---

## Switch between MTR account and administrator account

To switch from the MTR account to the administrator account,

1. Go to the MTR Settings page.
2. Select **Windows Settings**.
3. Select **Administrator** and enter the administrator password.

To switch from the administrator account to the MTR account,

1. Open the **Start** menu.
2. Select **Administrator** → **Sign out**.
3. Select **Skype** → **Sign in**.



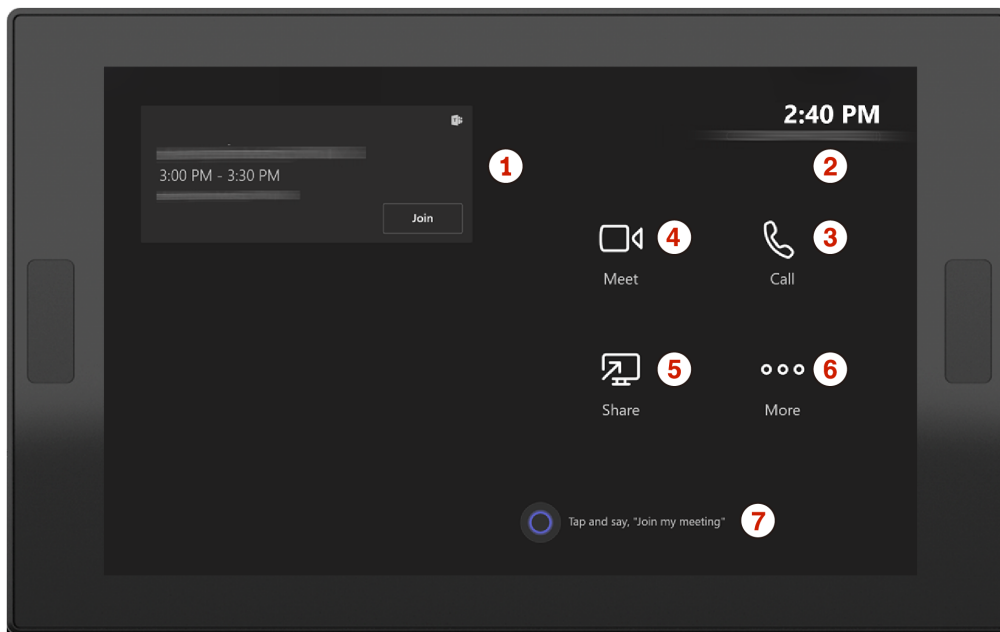
---

## Chapter 5. Typical conferencing scenarios

**Note:** This chapter provides typical conferencing scenarios with illustrations to help end users quickly get started with MTR. Illustrations might look different from your product. For the latest information about MTR, go to <https://support.microsoft.com/en-us/office/microsoft-teams-rooms-help-e667f40e-5aab-40c1-bd68-611fe0002ba2?ui=en-us&rs=en-us&ad=us>.

---

### Learn about MTR home screen

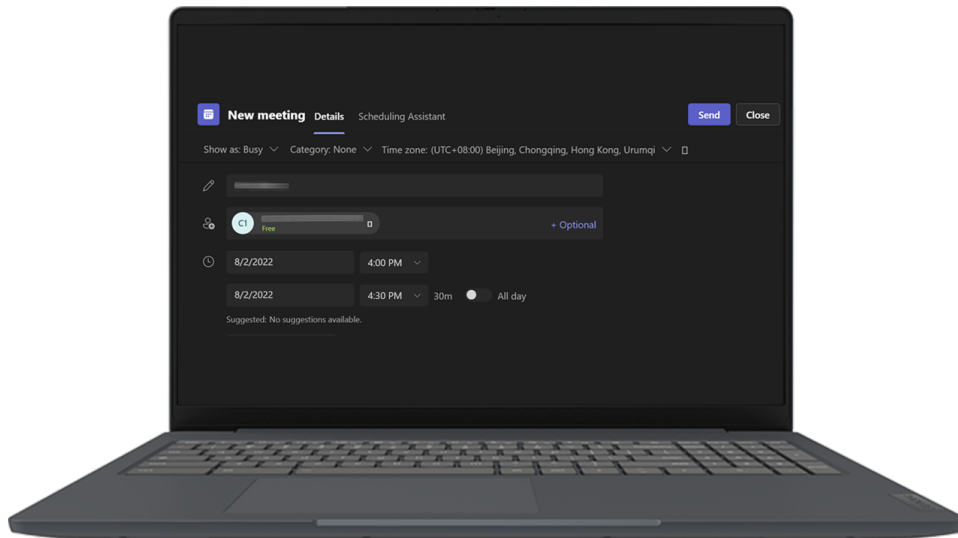


UI	Function
1. Room calendar	Show scheduled meetings.
2. Conference room name	Used to search for the conference room e-mail.
3. Call	Make a phone call.
4. New meeting	Start a new meeting.
5. Share content	Start or stop content sharing.
6. More	View more information and settings.
7. Cortana®	Enable or disable voice recognition.

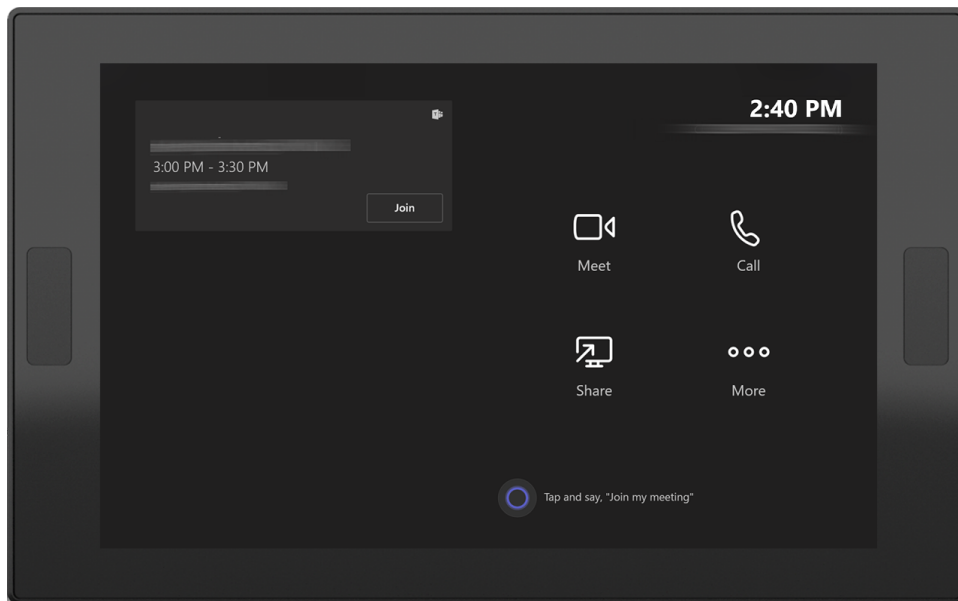
---

## Join a scheduled meeting

1. Send a meeting invitation to attendees and the conference room email address (MTR account). Once the meeting is accepted, it will appear on the room calendar shortly.



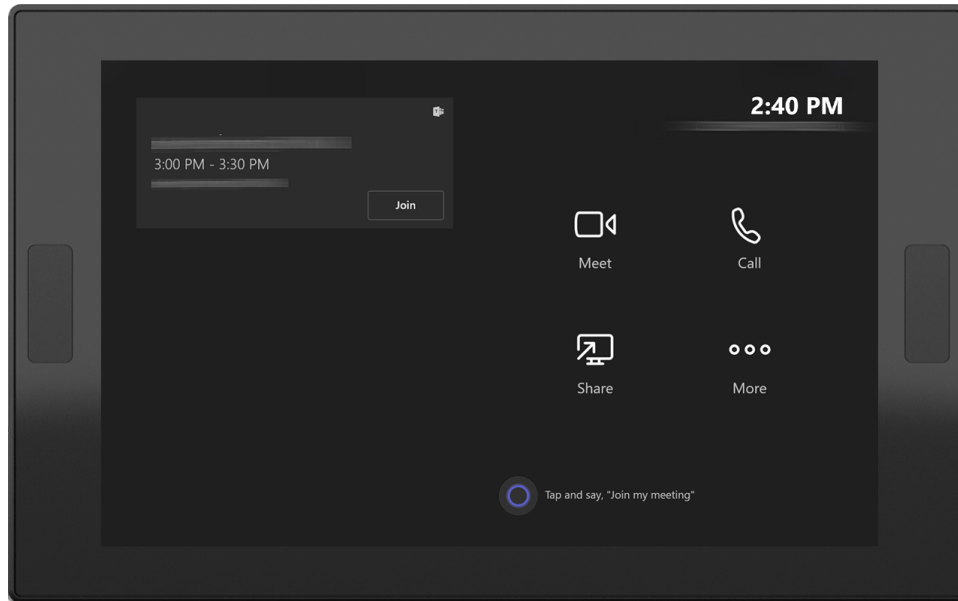
2. Select **Join** to join the meeting.



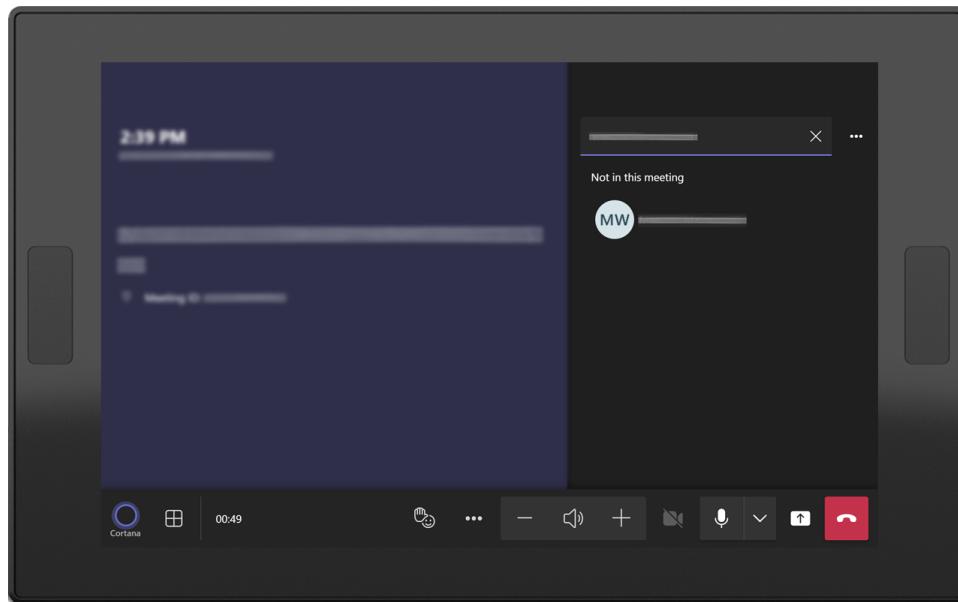
---

## Create a new meeting on ThinkSmart One

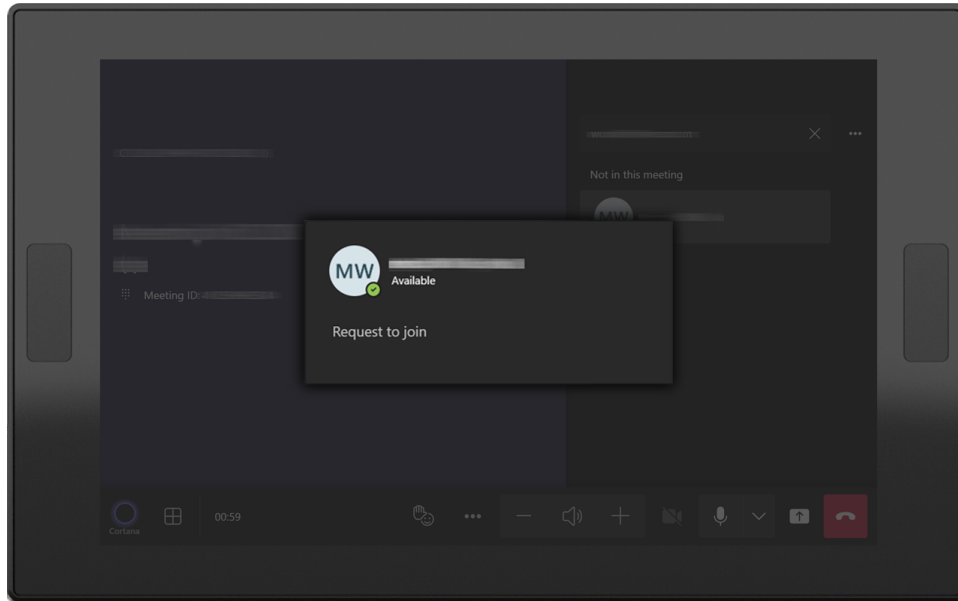
1. Select **Meet**.



2. Type a name to search and select the people you want to invite.



3. Select **Request to join** to send the invitation.



---

## Invite ThinkSmart One during a meeting

1. Search and select the conference room name from the Teams application on your computer.
2. Accept the call on ThinkSmart Controller to join the meeting.

---

## Share content

### Share your screen with in-room attendees

Connect your computer to the HDMI-in connector on ThinkSmart One. Your screen will be shared automatically.

### Share your screen with in-room attendees and remote attendees

1. Connect your computer to the HDMI-in connector on ThinkSmart One. Your screen will be shared with in-room attendees automatically.
2. Join the meeting from the MTR home screen on ThinkSmart Controller. Your screen will be shared with remote attendees too.

### Stop sharing your screen

- To stop sharing with remote attendees, select the stop presenting icon from ThinkSmart Controller.
- To stop sharing with in-room attendees, disconnect your computer from ThinkSmart One.

---

## Chapter 6. Secure ThinkSmart One and information

### Notes:

- Connect a keyboard to ThinkSmart One for easy configurations.
- In this chapter, to turn off or restart a computer refers to turn off or restart the computing unit of ThinkSmart One.
- The Non-operation mode refers to the device status in which the system clock is on while the system running has stopped.

---

### UEFI BIOS passwords

You can set passwords in UEFI (Unified Extensible Firmware Interface) BIOS (Basic Input/Output System) to strengthen the security of your computer.

#### Password types

You can set a power-on password, supervisor password, system management password, or hard disk password in UEFI BIOS to prevent unauthorized access to your computer. However, you are not prompted to enter any UEFI BIOS password when your computer resumes from Non-operation mode.

- Power-on password

When a power-on password is set, you are prompted to enter a valid password each time the computer is turned on.

- Supervisor password

Setting a supervisor password deters unauthorized users from changing configuration settings. If you are responsible for maintaining the configuration settings of several computers, you might want to set a supervisor password.

When a supervisor password is set, you are prompted to enter a valid password each time you try to enter the BIOS menu.

If both the power-on password and supervisor password are set, you can enter either password. However, you must use your supervisor password to change any configuration settings.

- Hard disk password

Setting a hard disk password prevents unauthorized access to the data on the storage drive. When a hard disk password is set, you are prompted to enter a valid password each time you try to access the storage drive.

**Note:** After you set a hard disk password, your data on the storage drive is protected even if the storage drive is removed from one computer and installed in another.

- System management password (for selected models)

You can enable the system management password to have the same authority as the supervisor password to control security related features. To customize the authority of the system management password through the UEFI BIOS menu:

1. Restart the computer. When the logo screen is displayed, press F1 or Fn+F1.
2. Select **Security → System Management Password Access Control**.
3. Follow the on-screen instructions.

If you have set both the supervisor password and the system management password, the supervisor password overrides the system management password.

## Set, change, and remove a password

Before you start, print these instructions.

1. Restart the computer. When the logo screen is displayed, press F1 or Fn+F1.
2. Select **Security**.
3. Depending on the password type, select **Set Supervisor Password**, **Set Power-On Password**, **Set System Management Password**, or **Hard Disk Password** and press Enter.
4. Follow the on-screen instructions to set, change, or remove a password.
5. Press F10 or Fn+F10 to save the changes and exit.

You should record your passwords and store them in a safe place. If you forget the passwords, contact a Lenovo-authorized service provider to have the passwords removed.

**Note:** If the hard disk password is forgotten, Lenovo cannot remove the password or recover data from the storage drive.

---

## Use BIOS security solutions

This section provides BIOS solutions to secure your computer and information.

### Wipe the storage drive data

It is recommended that you wipe the storage drive data before recycling the storage drive or the computer.

To wipe the storage drive data:

1. Restart the computer. When the logo screen is displayed, press F1 or Fn+F1.
2. Select **Security** → **secure wipe** → **Enabled**.
3. Press F10 or Fn+F10 to save the changes and exit.
4. Restart the computer. When the logo screen is displayed, press F12 or Fn+F12.
5. Select **App Menu** → **secure wipe** and press Enter.
6. Select the storage drive you will wipe and click **NEXT**.
7. Select the entire storage drive or partition to wipe as desired.
8. Select the method as desired and click **NEXT**.
9. Click **Yes** to confirm your option when the prompting window is displayed.
10. If you have set a hard disk password for the storage drive, enter the password. Otherwise, set a temporary password following the on-screen instructions. Then, click **NEXT**. The wiping process begins.

**Note:** Duration of the wiping process varies depending on the storage drive capacity.

11. Click **Reboot** when you are prompted to reset the system, and then one of the following will happen:
  - If the system storage drive data is wiped, you will be prompted that no operating system is found.
  - If the non-system storage drive data is wiped, the computer restarts automatically.

### Intel BIOS guard

The Intel® BIOS Guard module cryptographically verifies all BIOS updates. This hardware-based security helps prevent software and malware attacks on the computers BIOS.

## Smart USB Protection

The Smart USB Protection function is a security function that helps prevent data from being copied from the computer to USB storage devices connected to the computer. You can set the Smart USB Protection function to one of the following modes:

- **Disabled** (default setting): You can use the USB storage devices without limitation.
- **Read Only**: You cannot copy data from the computer to the USB storage devices. However, you can access or modify data on the USB storage devices.
- **No Access**: You cannot access the USB storage devices from the computer.

To configure the Smart USB Protection function:

1. Restart the computer. When the logo screen is displayed, press F1 or Fn+F1.
2. Select **Security → Smart USB Protection** and press Enter.
3. Select the desired setting and press Enter.
4. Press F10 or Fn+F10 to save the changes and exit.

---

## Use software security solutions

This section provides software solutions to secure your computer and information.

### Windows firewalls

A firewall can be hardware, software, or a combination of both depending on the level of security required. Firewalls work on a set of rules to determine which inbound and outbound connections are authorized. If the computer is preinstalled with a firewall program, it helps protect against computer Internet security threats, unauthorized access, intrusions, and Internet attacks. It also protects your privacy. For more information about how to use the firewall program, refer to the help system of your firewall program.

To use Windows firewalls:

1. Type Control Panel in the Windows search box and then press Enter. View by large icons or small icons.
2. Click Windows Defender Firewall, and then follow the on-screen instructions.

### Computrace Agent software embedded in firmware (for selected models)

The Computrace Agent software is an IT asset management and computer theft recovery solution. The software detects if changes have been made on the computer, such as hardware, software, or the computer call-in location. You might have to purchase a subscription to activate the Computrace Agent software.





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## Chapter 7. UEFI BIOS

### Notes:

- Connect a keyboard to ThinkSmart One for easy configurations.
- In this chapter, to turn off or restart a computer means to turn off or restart the computing unit of ThinkSmart One.

---

### What is UEFI BIOS

**Note:** The operating system settings might override any similar settings in UEFI BIOS.

UEFI BIOS is the first program that the computer runs when the computer is turned on. UEFI BIOS initializes the hardware components and loads the operating system and other programs. Your computer comes with a setup program with which you can change UEFI BIOS settings.

---

### Enter the BIOS menu

Restart the computer. When the logo screen is displayed, press F1 or Fn+F1 to enter the BIOS menu.

**Note:** If you have set BIOS passwords, enter the correct passwords when prompted. You also can select **No** or press Esc to skip the password prompt and enter the BIOS menu. However, you cannot change the system configurations that are protected by passwords.

---

### Navigate in the BIOS interface

**Attention:** The default configurations are already optimized for you in **boldface**. Improper change of the configurations might cause unexpected results.

Depending on your keyboard, you can navigate in the BIOS interface by pressing the following keys, or combinations of Fn and the following keys:

---

Key	Function
F1 or Fn+F1	General Help
Esc or Fn+Esc	Exit the submenu
↑ ↓ or Fn+↑ ↓	Locate an item
← → or Fn+← →	Move keyboard focus
+/- or Fn++/-	Change value
Enter	Enter the submenu
F9 or Fn+F9	Setup Defaults
F10 or Fn+F10	Save and exit

---

---

### Change the display language of UEFI BIOS

UEFI BIOS supports three or four display languages: English, French, simplified Chinese, and Russian (for selected models).

To change the display language of UEFI BIOS:

1. Select **Main → Language** and press Enter.
2. Set the display language as desired.

---

## Change the display mode of UEFI BIOS (for selected models)

You can use UEFI BIOS in the graphic mode or the text mode according to your needs.

The keys on the keyboard used to perform various tasks are displayed at the bottom of the screen. In addition to the keyboard, you also can use the mouse to make selections.

To change the display mode of UEFI BIOS:

1. Restart the computer. When the logo screen is displayed, press F1 or Fn+F1.
2. Select **Main → Setup Mode Select** and press Enter.
3. Set the display mode as desired.

---

## Set the system date and time

1. Restart the computer. When the logo screen is displayed, press F1 or Fn+F1.
2. Select **Main → System Time & Date** and press Enter.
3. Set the system date and time as desired.
4. Press F10 or Fn+F10 to save the changes and exit.

---

## Change the boot priority order

If the computer does not boot from a device as expected, you can change the boot priority order permanently or select a temporary boot device.

### Change the boot priority order permanently

1. Depending on the type of the storage device, do one of the following:
  - If the storage device is internal, go to step 2.
  - If the storage device is a disc, ensure that the computer is on or turn on the computer. Then, insert the disc into the optical drive.
  - If the storage device is an external device other than a disc, connect the storage device to the computer.
2. Restart the computer. When the logo screen is displayed, press F1 or Fn+F1.
3. Select **Startup → Boot Priority Order**, and then follow the on-screen instructions to change the boot priority order.
4. You can also select the first priority device group by selecting **Startup → First Boot Device**, and then follow the on-screen instructions to select the first boot device within this group. Your computer will boot from the first boot device before trying the boot priority order you set in the previous step.
5. Press F10 or Fn+F10 to save the changes and exit.

### Select a temporary boot device

**Note:** Not all discs and storage drives are bootable.

1. Depending on the type of the storage device, do one of the following:
  - If the storage device is internal, go to step 2.

- If the storage device is a disc, ensure that the computer is on or turn on the computer. Then, insert the disc into the optical drive.
  - If the storage device is an external device other than a disc, connect the storage device to the computer.
2. Restart the computer. When the logo screen is displayed, press F12 or Fn+F12.
  3. Select the storage device as desired and press Enter.

If you want to change the boot priority order permanently, select **Enter Setup** on Startup Device Menu and press Enter to enter the BIOS menu.

---

## Enable or disable a device

This section provides information about how to enable or disable user access to hardware devices (such as USB connectors or storage drives).

To enable or disable a device, do the following:

1. Restart the computer. When the logo screen is displayed, press F1 or Fn+F1.
2. Select **Devices**.
3. Select the device you want to enable or disable and press Enter.
4. Select the desired setting and press Enter.
5. Press F10 or Fn+F10 to save the changes and exit.

---

## Enable or disable the configuration change detection feature

If you enable configuration change detection, when the POST detects configuration changes of some hardware devices (such as storage drives or memory modules), an error message will be displayed when you turn on the computer.

To enable or disable the configuration change detection feature:

1. Restart the computer. When the logo screen is displayed, press F1 or Fn+F1.
2. Select **Security → Configuration Change Detection** and press Enter.
3. Enable or disable the feature as desired.
4. Press F10 or Fn+F10 to save the changes and exit.

To bypass the error message and log in to the operating system, press F2 or Fn+F2. To clear the error message, enter the BIOS menu, save and then exit.

---

## Enable or disable the automatic power-on feature

The Automatic Power On item in UEFI BIOS provides various options for you to make your computer start up automatically.

To enable or disable the automatic power-on feature:

1. Restart the computer. When the logo screen is displayed, press F1 or Fn+F1.
2. Select **Power → Automatic Power On** and press Enter.
3. Select the feature as desired and press Enter.
4. Enable or disable the feature as desired.
5. Press F10 or Fn+F10 to save the changes and exit.

---

## Change BIOS settings before installing a new operating system

BIOS settings vary by operating system. Change the BIOS settings before installing a new operating system.

Microsoft constantly makes updates to the Windows operating system. Before installing a particular Windows version, check the compatibility list for the Windows version. For details, go to:

<https://support.lenovo.com/us/en/solutions/windows-support>

To change the BIOS settings:

1. Restart the computer. When the logo screen is displayed, press F1 or Fn+F1.
2. From the main interface, select **Security** → **Secure Boot** and press Enter.
3. Depending on the operating system to be installed, do one of the following:
  - To install a Windows operating system that supports secure boot, select **Enabled** for **Secure Boot**.
  - To install an operating system that does not support secure boot, such as some Linux operating systems, select **Disabled** for **Secure Boot**.
4. Press F10 or Fn+F10 to save the changes and exit.

---

## Exit the BIOS menu

To exit the BIOS menu, do one of the following:

- If you want to save the new settings, press the F10 key. Then, select **Yes** in the window displayed and press Enter.

**Note:** For some keyboards, you might need to press Fn+F10 to exit the BIOS menu.

- If you do not want to save the new settings, select **Exit** → **Discard Changes and Exit** and press Enter. Then, select **Yes** in the window displayed and press Enter.

---

## Update UEFI BIOS

When you install a new program, device driver, or hardware component, you might need to update UEFI BIOS. You can update the BIOS from your operating system or a flash update disc (supported only on selected models).

Download and install the latest UEFI BIOS update package from the Lenovo Support Web site:

1. Go to <https://smartsupport.lenovo.com/>.
2. Download the flash BIOS update driver for the operating system version or the ISO image version (used to create a flash update disc). Then, download the installation instructions for the flash BIOS update driver you have downloaded.
3. Print the installation instructions and follow the instructions to update the BIOS.

---

## Recover from a BIOS update failure

1. Remove all media from the drives and turn off all connected devices.
2. Insert the BIOS update disc into the optical drive, and then turn off the computer.
3. Disconnect all power cords from electrical outlets. Then, remove any parts that impede access to the Clear CMOS/Recovery jumper.
4. Move the jumper from the standard position to the maintenance position.
5. Reconnect the power cords for the computer and the monitor to electrical outlets.

6. Turn on the computer and the monitor. When the computer beeps, the recovery process begins.
  7. After the recovery process is completed, the computer will be turned off automatically.  
  
**Note:** Depending on the computer model, the recovery process will take two to three minutes.
  8. Disconnect all power cords from electrical outlets.
  9. Move the jumper back to the standard position.
  10. Reinstall all the parts that have been removed. Then, reconnect the power cords for the computer and the monitor to electrical outlets.
  11. Turn on the computer and the monitor. When the logo screen is displayed, press F1 or Fn+F1.
  12. To prevent data loss, ensure that BIOS settings are restored to an earlier point. For BIOS configurations, see Chapter 7 “UEFI BIOS” on page 35.
- 

## Clear CMOS

1. Remove all media from the drives and turn off all connected devices and the computer.
2. Disconnect all power cords from electrical outlets. Then, remove any parts that impede access to the Clear CMOS/Recovery jumper.
3. Move the jumper from the standard position to the maintenance position.
4. Reconnect the power cords for the computer and the monitor to electrical outlets.
5. Turn on the computer and the monitor. When the computer beeps, wait for approximately 10 seconds.
6. Turn off the computer by holding the power button for approximately four seconds.
7. Disconnect all power cords from electrical outlets.
8. Move the jumper back to the standard position.
9. Reinstall all the parts that have been removed. Then, reconnect the power cords for the computer and the monitor to electrical outlets.
10. Turn on the computer and the monitor. When the logo screen is displayed, press F1 or Fn+F1.
11. To prevent data loss, ensure that BIOS settings are restored to an earlier point. For BIOS configurations, see Chapter 7 “UEFI BIOS” on page 35.



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## Chapter 8. FAQ

This chapter lists out some most frequently asked questions for your reference. Please go to <https://support.lenovo.com/solutions/HT513794> to read the latest version.

Question	Answer
How to apply for an MTR account and its password?	Please refer to: <a href="https://learn.microsoft.com/en-us/microsoftteams/rooms/with-office-365?tabs=m365-admin-center%2Cazure-active-directory2-password">https://learn.microsoft.com/en-us/microsoftteams/rooms/with-office-365?tabs=m365-admin-center%2Cazure-active-directory2-password</a>
How to reset the Admin password if I forgot it?	<p>There are two ways to reset Admin password.</p> <ul style="list-style-type: none"><li>• <b>By RUSB</b> Please visit <a href="https://smartsupport.lenovo.com/us/en/">https://smartsupport.lenovo.com/us/en/</a> for detailed information.</li><li>• <b>By password reset disk</b><ol style="list-style-type: none"><li>1. Sign in to Admin account.</li><li>2. Go to <b>Control Panel</b> and view by large icons or small icons.</li><li>3. Click <b>User Accounts</b></li><li>4. Insert a USB flash drive and select <b>Create a password reset disk</b>, then follow the on-screen instructions to finish the process.</li></ol></li></ul>
How to reset the device to factory mode?	<p>There are two ways to reset the device to factory mode. :</p> <ul style="list-style-type: none"><li>• <b>By MTR</b> Please visit <a href="https://learn.microsoft.com/en-us/microsoftteams/rooms/recovery-tool">https://learn.microsoft.com/en-us/microsoftteams/rooms/recovery-tool</a> for detailed information.</li><li>• <b>By Windows</b><ol style="list-style-type: none"><li>1. Open the <b>Start</b> menu.</li><li>2. Click <b>Settings → Update &amp; Security → Recovery → Reset this PC → Get Started</b>.</li><li>3. Select <b>Remove everything → Local reinstall → Next → Reset</b>. Then the reset process has started.</li><li>4. After the reset process, the device will automatically restart. You need to go through the OOBE process to configure windows.</li></ol></li></ul> <p><b>CAUTION:</b> <b>All data will be removed after device reset.</b></p>
How to upgrade the OS to latest version?	You need to upgrade the MTR application first and then finish the OS update via <b>Windows Update</b>
Can I downgrade the OS to a previous version?	No.

Question	Answer
What are the TCP/IP ports that must be opened in the infrastructure	<ul style="list-style-type: none"> <li>• Signal packets: TCP 443</li> <li>• Audio or video packets: TCP 443, UDP 3478, TCP/UDP 50,000 to 59,999</li> <li>• Desktop sharing: TCP 443, TCP/UDP 50,000 to 59,999</li> <li>• http or https: TCP 80 and 443</li> </ul> <p>These are the basic default ports MTR will need. There may be other requirements based on your environment. For more information, see:</p> <ul style="list-style-type: none"> <li>• Firewall Proxy Host Name/Port Examples section at <a href="https://learn.microsoft.com/en-us/MicrosoftTeams/rooms/rooms-prep">https://learn.microsoft.com/en-us/MicrosoftTeams/rooms/rooms-prep</a></li> <li>• Office 365 URLs and IP address ranges at <a href="https://learn.microsoft.com/en-us/microsoft-365/enterprise/urls-and-ip-address-ranges?redirectSourcePath=%252fen-us%252farticle%252fOffice-365-URLs-and-IP-address-ranges-8548a211-3fe7-47cb-abb1-355ea5aa88a2=o365-worldwide">https://learn.microsoft.com/en-us/microsoft-365/enterprise/urls-and-ip-address-ranges?redirectSourcePath=%252fen-us%252farticle%252fOffice-365-URLs-and-IP-address-ranges-8548a211-3fe7-47cb-abb1-355ea5aa88a2=o365-worldwide</a></li> </ul>
What are the TCP/IP ports that must be opened in the infrastructure?	<ul style="list-style-type: none"> <li>• Signal packets: TCP 443</li> <li>• Audio or video packets: TCP 443, UDP 3478, TCP/UDP 50,000 to 59,999</li> <li>• Desktop sharing: TCP 443, TCP/UDP 50,000 to 59,999</li> <li>• http or https: TCP 80 and 443</li> </ul> <p>These are the basic default ports MTR will need. There may be other requirements based on your environment. For more information, see</p> <ul style="list-style-type: none"> <li>• Firewall Proxy Host Name/Port Examples section at <a href="https://docs.microsoft.com/en-us/MicrosoftTeams/rooms/rooms-prep">https://docs.microsoft.com/en-us/MicrosoftTeams/rooms/rooms-prep</a></li> <li>• <a href="https://docs.microsoft.com/en-us/microsoft-365/enterprise/urls-and-ip-address-ranges?redirectSourcePath=%252fen-us%252farticle%252fOffice-365-URLs-and-IP-address-ranges-8548a211-3fe7-47cb-abb1-355ea5aa88a2=o365-worldwide#BKMK_Identity">https://docs.microsoft.com/en-us/microsoft-365/enterprise/urls-and-ip-address-ranges?redirectSourcePath=%252fen-us%252farticle%252fOffice-365-URLs-and-IP-address-ranges-8548a211-3fe7-47cb-abb1-355ea5aa88a2=o365-worldwide#BKMK_Identity</a></li> </ul>
How to configure the network proxy for the device?	See the proxy configurations at <a href="https://docs.microsoft.com/en-us/microsoft-teams/proxy-servers-for-skype-for-business-online">https://docs.microsoft.com/en-us/microsoft-teams/proxy-servers-for-skype-for-business-online</a> .



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## Chapter 9. Troubleshooting, diagnostics, and recovery

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### Basic procedure for resolving problems

Use the basic procedure as a starting point for resolving problems.

#### Prerequisite

Before you start, read “Read this first” on page i and print the following instructions.

1. Check that:
  - a. The cables for all connected devices are connected correctly and securely.
  - b. All components have been reassembled correctly.
  - c. All connected devices that require ac power are connected to properly grounded and working electrical outlets.
  - d. All connected devices are enabled in UEFI BIOS.
2. See Chapter 9 “Troubleshooting, diagnostics, and recovery” on page 43 to resolve the problem you are experiencing, run the diagnostic program, and recover your operating system.
3. If the problem persists, contact Lenovo. See Chapter 10 “Help and support” on page 47.

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### Troubleshooting

Use the troubleshooting information to find solutions to problems that have definite symptoms.

Problem	Solution
MTR main interface shows “Device isn't connected to internet” during use.	<ul style="list-style-type: none"><li>• Ensure the device is connected to an RJ 45 network port.</li><li>• Ensure the network is working properly and not restricted or blocked by firewall.</li><li>• Restarted the device and sign in to MTR again.</li></ul>
MTR main interface shows “Can not fetch the calendar” during use.	<ol style="list-style-type: none"><li>1. Click <b>More</b> → <b>Settings</b> on MTR home page.</li><li>2. Click <b>Account</b> and then enable <b>Modern Authentication</b>.</li></ol>
Can not turn on the camera during a meeting.	<ul style="list-style-type: none"><li>• Ensure that the account has been granted the authority to use the camera.</li><li>• Ensure that camera could work in Administrator account with <b>Camera</b> application.</li><li>• Ensure that the camera is not configured as content camera.</li></ul>
ThinkSmart Controller does not show the OOBE window.	The OOBE window is designed to display on the external display rather than ThinkSmart Controller. Please complete the settings with your keyboard and mouse on the connected external display.

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### Diagnostics

Use diagnostic solutions to test hardware components and report operating-system-controlled settings that interfere with the correct operation of your computer.

To use the Lenovo diagnostic:

1. Turn on or restart the computer.

2. Before Windows starts, repeatedly press and release the F10 key until the Lenovo diagnostic opens.

**Note:** If a BIOS password has been set, the UEFI BIOS will not open until you enter the correct password. For more information, see "" on page .

3. Follow the instructions on the screen to use the diagnostic program.

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## Recovery

This section introduces the recovery information of the Windows 10 operating system. Ensure that you read and follow the on-screen recovery instructions. The data on your computer might be deleted during the recovery process. To avoid data loss, make a backup copy of all the data that you want to keep.

### Restore system files and settings to an earlier point

1. Go to **Control Panel** and view by large icons or small icons.
2. Click **Recovery** → **Open System Restore**. Then, follow the on-screen instructions.

### Restore your files from a backup

Pseudo topic: DITA topic "x-wc://file=t0000693704.xml" not found

## Reset from Windows

**Note:** The items in the graphical user interface (GUI) might change without notice.

1. Ensure that an external display is connected to the computer.
2. Open the **Start** menu, and then click **Settings** → **Update & Security** → **Recovery**.
3. In the **Reset this PC** section, click **Get started**.
4. Select **Remove everything** → **Just remove my files** → **Reset**. Then, your computer will reset to its factory state within a few hours.

**Notes:**

- Reset option **Keep my files** is not supported.
- Please do not turn off or restart your computer during the reset.
- It is normal that ThinkSmart Controller will go blank for a while during the reset process.

## Reset from BIOS

**Note:** The items in the graphical user interface (GUI) might change without notice.

1. Ensure that an external display is connected to the computer.
2. Ensure that a keyboard is connected to the computer.
3. Restart your computer. At the beginning of the boot process, keep pressing F11 on the keyboard until Windows recovery environment opens.
4. Select **Troubleshoot** → **Reset this PC** → **Remove everything** → **Just remove my files** → **Reset**. Then, your computer will reset to its factory state within a few hours.

**Notes:**

- Reset option **Keep my files** is not supported.
- Please do not turn off or restart your computer during the reset.
- It is normal that ThinkSmart Controller will go blank for a while during the reset process.

## Use advanced options

1. Open the **Start** menu, and then click **Settings → Update & security → Recovery**.
2. In the **Advanced startup** section, click **Restart now → Troubleshoot → Advanced options**.
3. Select a preferred option, and then follow the on-screen instructions.

## Windows automatic recovery

**Note:** Ensure that your computer is connected to ac power during the recovery process.

The Windows recovery environment on your computer operates independently from the Windows 10 operating system. It enables you to recover or repair the operating system even if the Windows 10 operating system fails to start.

After two consecutive failed boot attempts, the Windows recovery environment starts automatically. Then, you can choose repair and recovery options by following the on-screen instructions.

## Create and use a recovery USB device

It is recommended that you create a recovery USB drive as early as possible as a backup for the Windows recovery programs. With the recovery USB drive, you can troubleshoot and fix the problems even if the preinstalled Windows recovery programs are damaged. If you did not create a recovery USB drive as a precautionary measure, you can contact Lenovo Customer Support Center and purchase one from Lenovo. For a list of the Lenovo Support phone numbers for your country or region, go to: <https://smartsupport.lenovo.com/supportphonenumberlist>

### Create a recovery USB drive

**Attention:** The creation process deletes anything stored on the USB drive. To avoid data loss, make a backup copy of all the data that you want to keep.

1. Ensure that your computer is connected to ac power.
2. Prepare a USB drive with capacity of at least 16 GB. The actual USB capacity required depends on the size of the recovery image.
3. Connect the prepared USB drive to the computer.
4. Type **recovery** in the search box. Then, click **Create a recovery drive**.
5. Click **Yes** in the User Account Control window to allow the Recovery Media Creator program to start.
6. In the Recovery Drive window, follow the on-screen instructions to create a recovery USB drive.

### Use the recovery USB drive

If your computer cannot be started, go to Chapter 10 “Help and support” on page 47 first to try to solve the problem by yourself. If the problem persists, use the recovery USB drive to recover your computer.

1. Ensure that your computer is connected to ac power.
2. Connect the recovery USB drive to the computer.
3. Turn on or restart the computer. When the logo screen is displayed, press F12. The Boot Menu window opens.
4. Select the recovery USB drive as the boot device. Then, follow the on-screen instructions to complete the process.

## Update the device driver

**Attention:** Reinstalling device drivers will change the current configuration of the computer.

You should download the latest driver for a component when you notice poor performance from that component or when you added a component. This action might eliminate the driver as the potential cause of a problem. Download and install the latest driver by one of the following methods:

- From the Lenovo Support Web site:

Go to <https://smartsupport.lenovo.com/> and select the entry for your computer. Then, follow the on-screen instructions to download and install necessary drivers and software.

- From Windows Update:

**Note:** The device drivers provided by Windows Update might not be tested by Lenovo. It is recommended that you get device drivers from Lenovo.

1. Open the **Start** menu.
2. Click **Settings → Update & Security → Windows Update**.
3. Follow the on-screen instructions.

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## Chapter 10. Help and support

This chapter provides help and support information for your product.

**Note:** ThinkSmart One is referred to as “Computer” in this chapter.

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### Register with Lenovo

To register with Lenovo, ensure that device is connected to the Internet. Then, go to <http://www.lenovo.com/register> and follow the instructions on the screen to enter the required information into Lenovo database.

The information enables Lenovo to contact you when there is a recall or other severe problem and provide quicker service when you call Lenovo for help. In addition, some locations offer extended privileges and services to registered users.

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### CRU replacement

Customer Replaceable Units (CRUs) are parts that can be upgraded or replaced by the customer. Lenovo computers contain the following types of CRUs:

- **Self-service CRUs:** Refer to parts that can be installed or replaced easily by customer themselves or by trained service technicians at an additional cost.
- **Optional-service CRUs:** Refer to 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 on installing the CRU, Lenovo will ship the CRU to you. CRU information and replacement instructions are shipped with your product and are available from Lenovo at any time upon request. 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 documentation at:

[https://www.lenovo.com/warranty/llw\\_02](https://www.lenovo.com/warranty/llw_02)

Refer to the following CRU list for your device.

#### Self-service CRUs

- Cable door
- Rubber foot
- Wall mount bracket, screws and nuts
- 135 W power adapter and power cord
- Controller unit

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### Self-help resources

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

Resources	How to access?
Product documentation: <ul style="list-style-type: none"> <li>• Documentation in the box</li> <li>• This <i>Guide</i></li> <li>• <i>Regulatory Notice</i></li> </ul>	Go to <a href="https://smartsupport.lenovo.com/">https://smartsupport.lenovo.com/</a> . Then, follow the on-screen instructions to filter out the documentation you want.
Lenovo Support Web site with the latest support information of the following: <ul style="list-style-type: none"> <li>• Drivers and software</li> <li>• Diagnostic solutions</li> <li>• Guides and manuals</li> <li>• Frequently asked questions</li> <li>• Product and service warranty</li> <li>• Product and parts details</li> <li>• Recovery</li> </ul>	<a href="https://smartsupport.lenovo.com/">https://smartsupport.lenovo.com/</a>
Windows help information	<ul style="list-style-type: none"> <li>• Open the <b>Start</b> menu and click <b>Get Help</b> or <b>Tips</b>.</li> <li>• Use Windows Search or the Cortana® personal assistant.</li> <li>• Microsoft support Web site: <a href="https://support.microsoft.com">https://support.microsoft.com</a></li> </ul>
Accessibility information	Go to <a href="https://www.lenovo.com/accessibility">https://www.lenovo.com/accessibility</a>
Microsoft Teams Rooms, Zoom Rooms	Go to <a href="https://support.lenovo.com/solutions/ht514061">https://support.lenovo.com/solutions/ht514061</a>
ThinkSmart Manager Services	Go to <a href="https://support.lenovo.com/solutions/tsm">https://support.lenovo.com/solutions/tsm</a>

## Additional services

Thank you, Lenovo customer, for your purchase of a ThinkSmart One.

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.

We expect you will have years of productive meeting experiences with our collaboration solution. To assist you in getting this collaboration solution installed in your environment, we have included two of our most popular ThinkSmart services: Deploy and Maintain.

### Customer Action

You must register this service with Lenovo so a service technician can contact you to schedule initial deployment service: <https://lenovosmartofficeservices.com>

To register, please provide the contact information for the person we should engage with, along with purchase information (place and date of purchase along with sales order or invoice number).

### Included Services

- **Deploy:** A ThinkSmart service to help setup, configure and integrate collaboration solution devices into your environment. All deployments include full documentation reports after complete.

- **Maintain:** A one-year (renewable) maintenance contract where technicians will assist with updates and device changes and provide easy to follow Do's and Don'ts. Device operability health check ins will ensure collaboration solution is healthy and running smoothly. Redeployment of solution, if required, into a different meeting space is included.

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## 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

Prepare the following before you contact Lenovo:

1. Record the problem symptoms and details:
  - What is the problem? Is it continuous or intermittent?
  - 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?
2. Record the system information:
  - Product name
  - Machine type and serial number (on the bottom of the product)

## 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://smartsupport.lenovo.com/supportphonest>

**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 the Lenovo Limited Warranty documentation at:

[https://www.lenovo.com/warranty/liw\\_02](https://www.lenovo.com/warranty/liw_02)

The LLW also is preinstalled on ThinkSmart One. To access the LLW, go to the following directory:

C:\Windows\System32\oobe\info\default



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## Appendix A. Compliance information

For more compliance information, refer to Regulatory Notice at <https://smartsupport.lenovo.com> and Generic Safety and Compliance Notices at [https://smartsupport.lenovo.com/docs/generic\\_notices\\_smart](https://smartsupport.lenovo.com/docs/generic_notices_smart)

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### Certification-related information

Product name	Machine type
ThinkSmart One	12BS,12BT, 12CG

Further compliance information related to your product is available at <https://www.lenovo.com/compliance>

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### Operating environment

#### Maximum altitude (without pressurization)

- Operating: From -15.2 m (-50 ft) to 3048 m (10 000 ft)
- Storage: From -15.2 m (-50 ft) to 10 668 m (35 000 ft)

#### Temperature

- Operating: From 10°C (50°F) to 35°C (95°F)
- Storage in original shipping packaging: From -20°C (-4°F) to 60°C (140°F)
- Storage without packaging: From -10°C (14°F) to 60°C (140°F)

**Note:** If your product is stored or transported in temperatures less than 10°C (50°F), allow the product to rise slowly to an optimal operating temperature before use. This process might take up to two hours. Using the product in a lower operating temperature might result in irreparable damage to your product.

#### Relative humidity

- Operating: 20%-80% (non-condensing)
- Storage: 20%–90% (non-condensing)



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## Appendix B. Notices and trademarks

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