aws

User Guide

Amazon WorkSpaces Thin Client

Amazon WorkSpaces Thin Client: User Guide

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What is Amazon WorkSpaces Thin Client?

WorkSpaces Thin Client is a cost-effective thin client device that is built to work with AWS End User Computing (EUC) virtual desktops to provide you with a complete cloud desktop solution. WorkSpaces Thin Client is a compact device designed to connect two monitors and multiple USB devices, such as a keyboard, mouse, headset, and webcam. To maximize endpoint security, WorkSpaces Thin Client devices do not allow local data storage or installation of unapproved applications. The WorkSpaces Thin Client device ships to you preloaded with device management software.

Topics

Are you a first-time WorkSpaces Thin Client user?

If you are a first-time user of WorkSpaces Thin Client, we recommend that you begin by reading the following sections:

- *Getting to know your WorkSpaces Thin Client*
- *Setting up your Amazon WorkSpaces Thin Client service*
- *Device specifications*

Accessing Amazon End User Computing (EUC) services through WorkSpaces Thin Client

You can access your choice of Amazon WorkSpaces, Amazon WorkSpaces Secure Browser, or AppStream 2.0 through the WorkSpaces Thin Client, and you can keep applications and data in the cloud for increased security and centralized administration.

Getting to know your WorkSpaces Thin Client device

WorkSpaces Thin Client gives you instant and secure access to your relevant applications and data through AWS End User Computing virtual desktops. To get started using your WorkSpaces Thin Client device, set it up with a keyboard, mouse, and monitor, and connect it to your network.

Let's get started!

Topics

Here is everything that you need for your WorkSpaces Thin Client device

To use WorkSpaces Thin Client, you will need the following:

You should have received this equipment. If you are missing anything on this list, contact your administrator.

Equipment provided

- WorkSpaces Thin Client device equipped with one USB-A port, one HDMI-Out port, and one Ethernet port

Required equipment (may not be provided)

- USB hub that supports USB-A input - connects into the device
- Keyboard - connects into the USB hub
- Mouse - connects into the USB hub
- Monitor - connects into the HDMI-Out port on the WorkSpaces Thin Client device

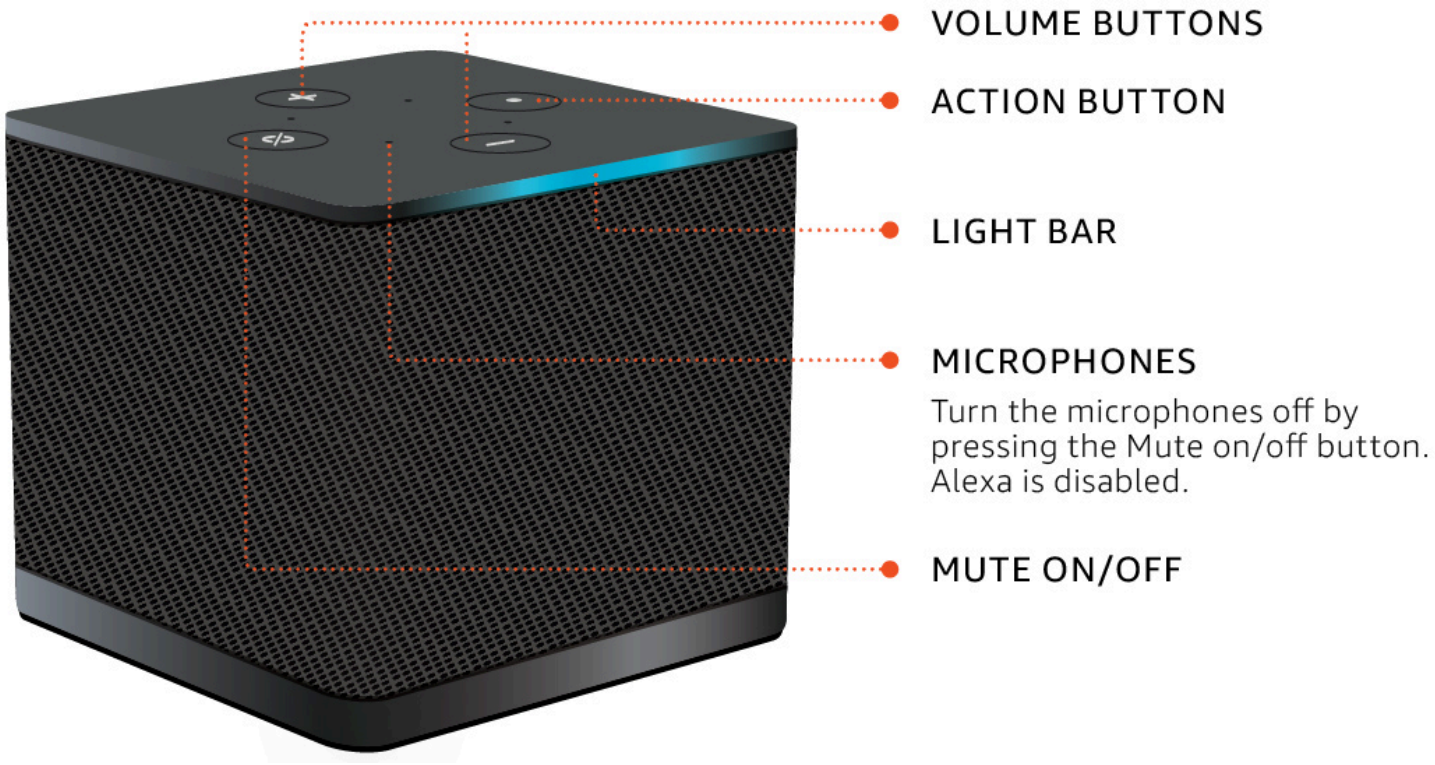
Optional equipment (not provided)

- Second Monitor - connects into the HDMI-Out port on the USB hub
- Webcam - connects into the USB hub
- Headset - that connects into the USB hub

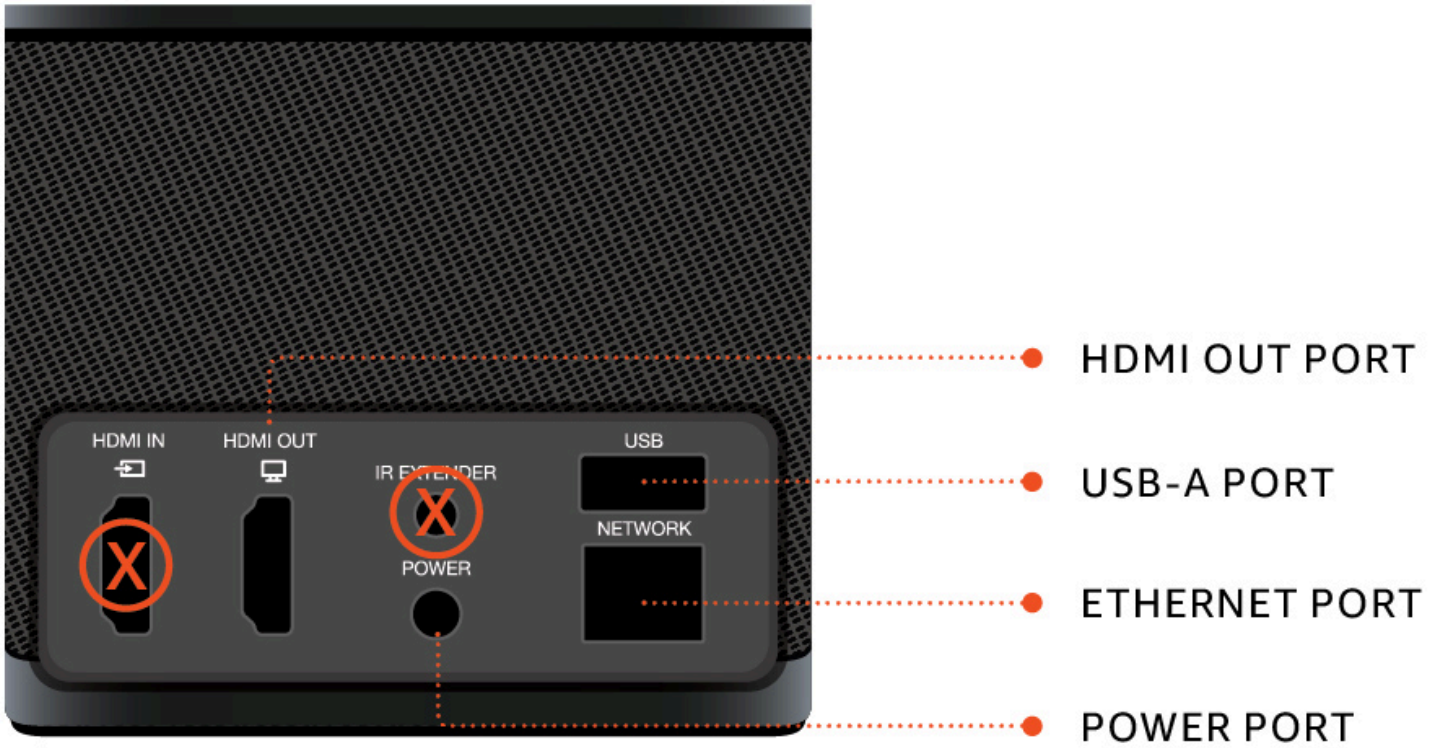
Meet your WorkSpaces Thin Client device

Hello! This is your WorkSpaces Thin Client device and its USB hub.

Front of the WorkSpaces Thin Client device

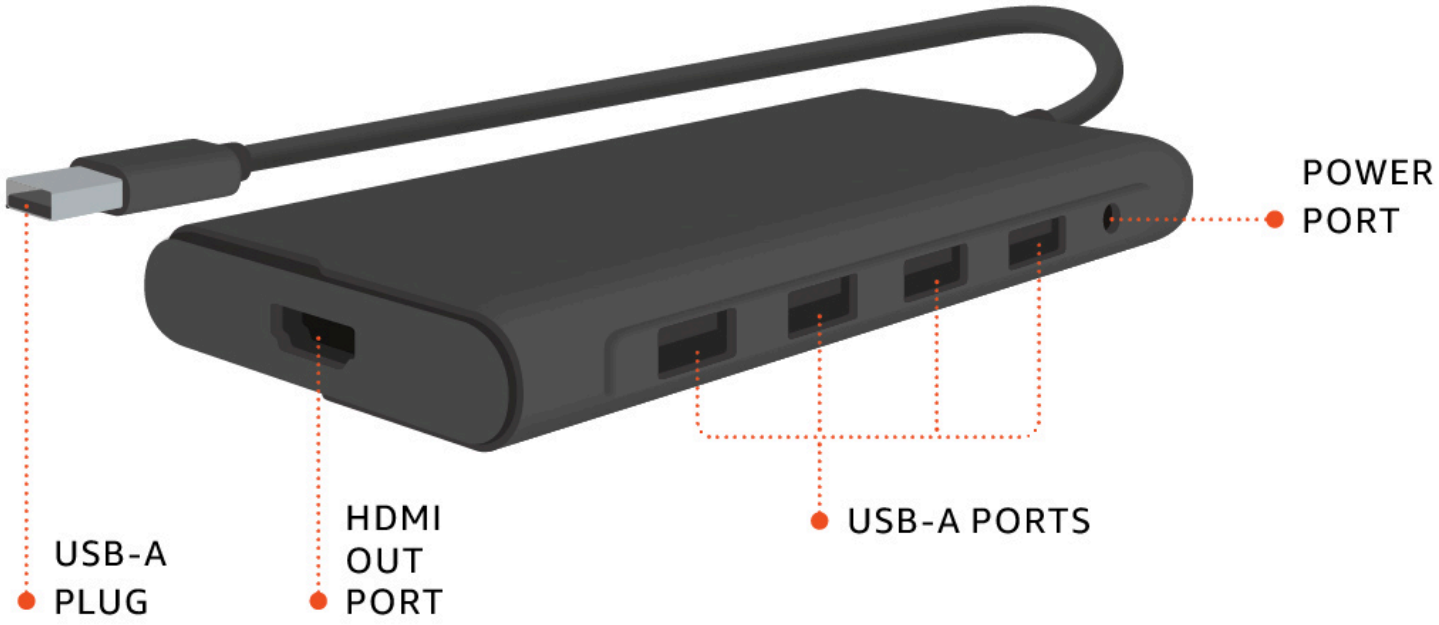


Back of the WorkSpaces Thin Client device



Later, you will use these ports to connect your other peripherals.

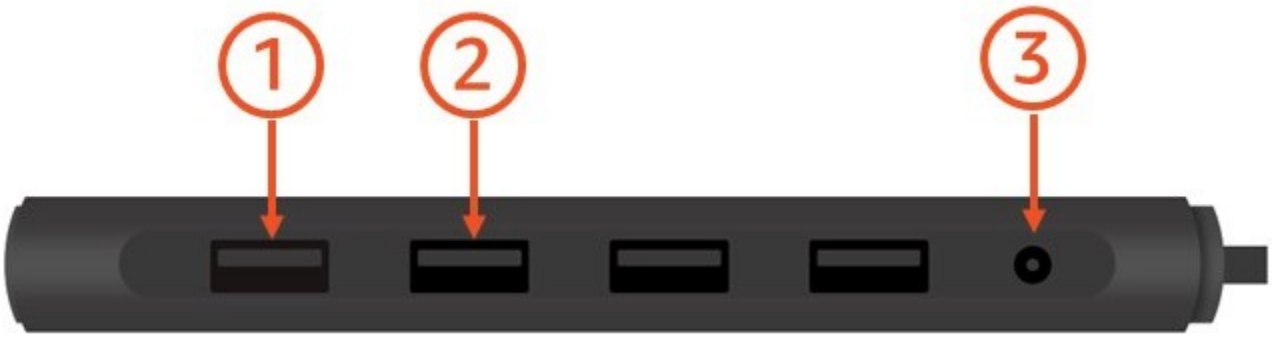
USB hub

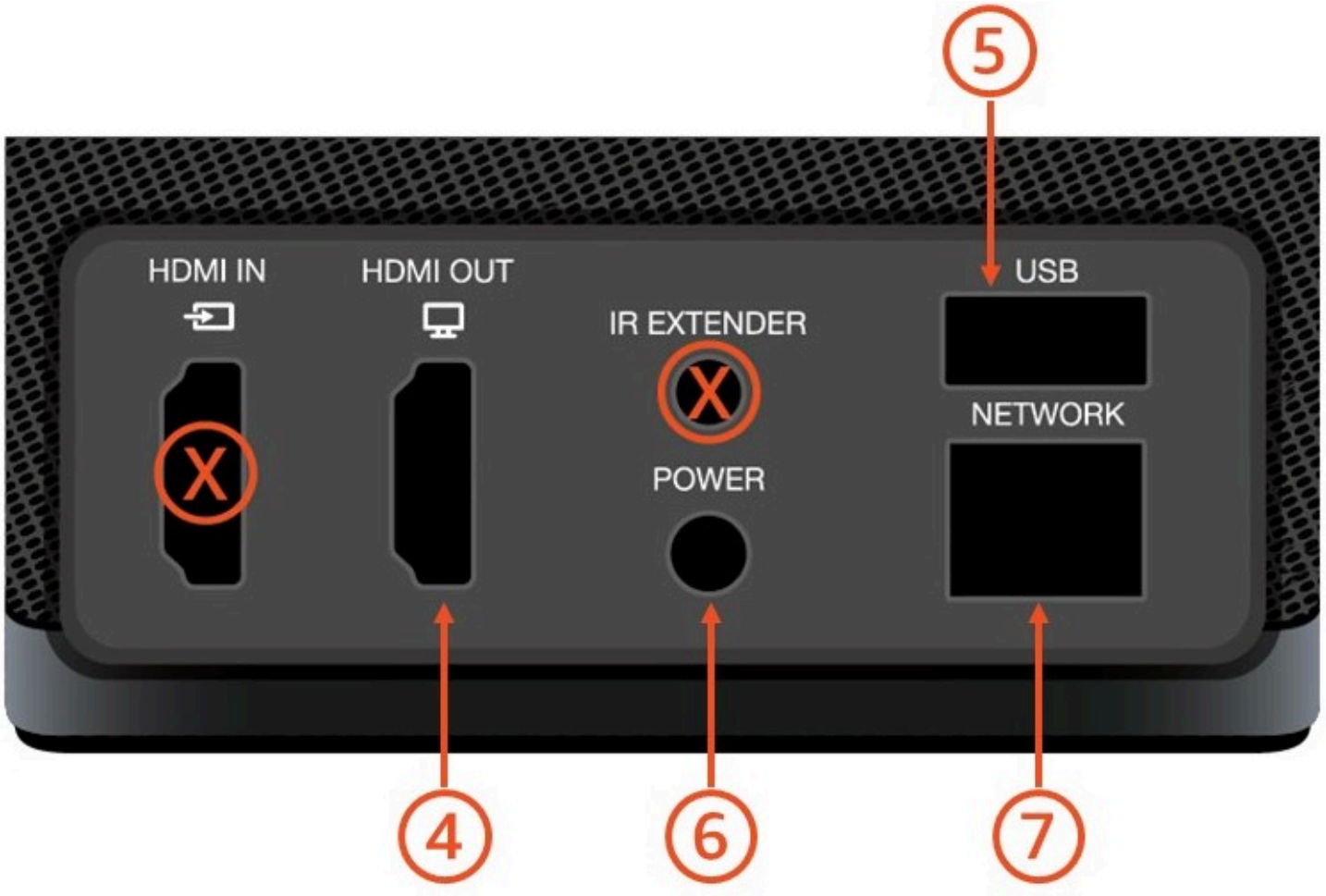


Later, you will use these ports to connect your other peripherals.

Connect your WorkSpaces Thin Client device

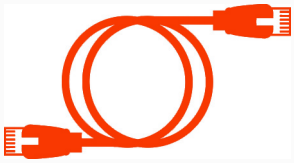
To use your WorkSpaces Thin Client device, you must have a keyboard, mouse, and monitor.





Number	Device	Instruction
1		Connect your mouse to a USB-A port on your hub.
2		Connect your keyboard to a USB-A port on your hub.

Number	Device	Instruction
3		Connect your hub power adapter to the power port on your hub.
4		Connect the HDMI port on your monitor to the HDMI-Out port on your WorkSpaces Thin Client with an HDMI cable (not included).
5		Connect your hub's USB-A plug to the USB port on your WorkSpaces Thin Client.
6		Connect your WorkSpaces Thin Client power adapter to the power port on your WorkSpaces Thin Client.

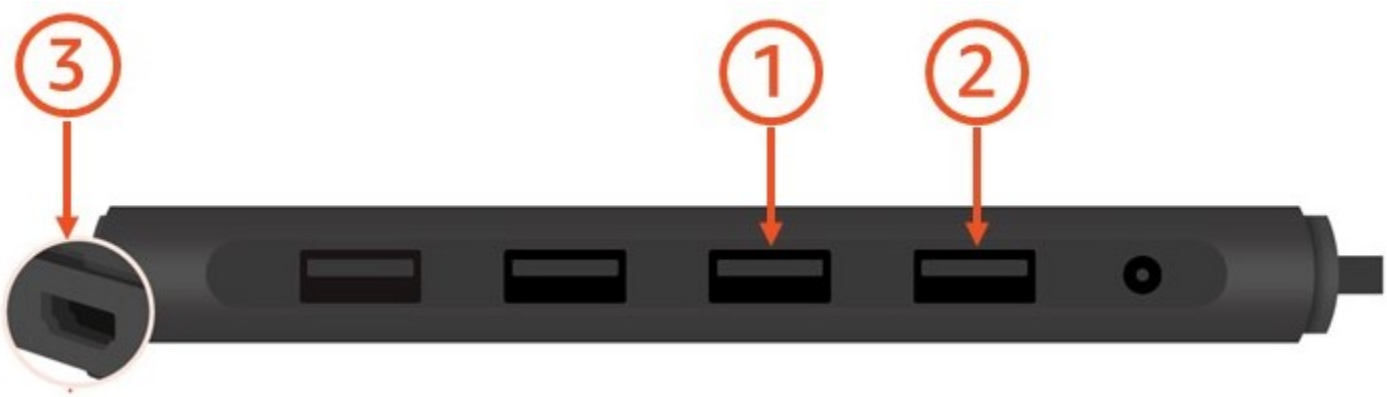
Number	Device	Instruction
7		(Optional) Connect an Ethernet cable. **Note** A network connection is required. If you prefer a wired Ethernet connection instead of Wi-Fi, connect the Ethernet cable (not included) to the network port.

Connect optional WorkSpaces Thin Client devices

You can also connect your WorkSpaces Thin Client device to a headset, camera, or second monitor.

Note

Do not connect or disconnect any of the accessories while the WorkSpaces Thin Client device is on. The WorkSpaces Thin Client device will not recognize the accessory.
If you disconnect an accessory while the WorkSpaces Thin Client device is on, turn off the device, reconnect the accessory, and then turn the device back on.



Number	Device	Instruction
1		Connect your headset to a USB-A port your hub.
2		Connect your webcam to a USB-A port your hub.
3		Connect a second monitor to the HDMI port at the end of the USB hub. Connect the HDMI port on your second monitor to the HDMI port at the end of your hub with an HDMI cable (not included).

Your WorkSpaces Thin Client device is ready

After you connect all of your peripherals, your WorkSpaces Thin Client is ready to be turned on.

1. Plug in your hub power adapter to a power outlet.
2. Plug in your WorkSpaces Thin Client power adapter to a power outlet.

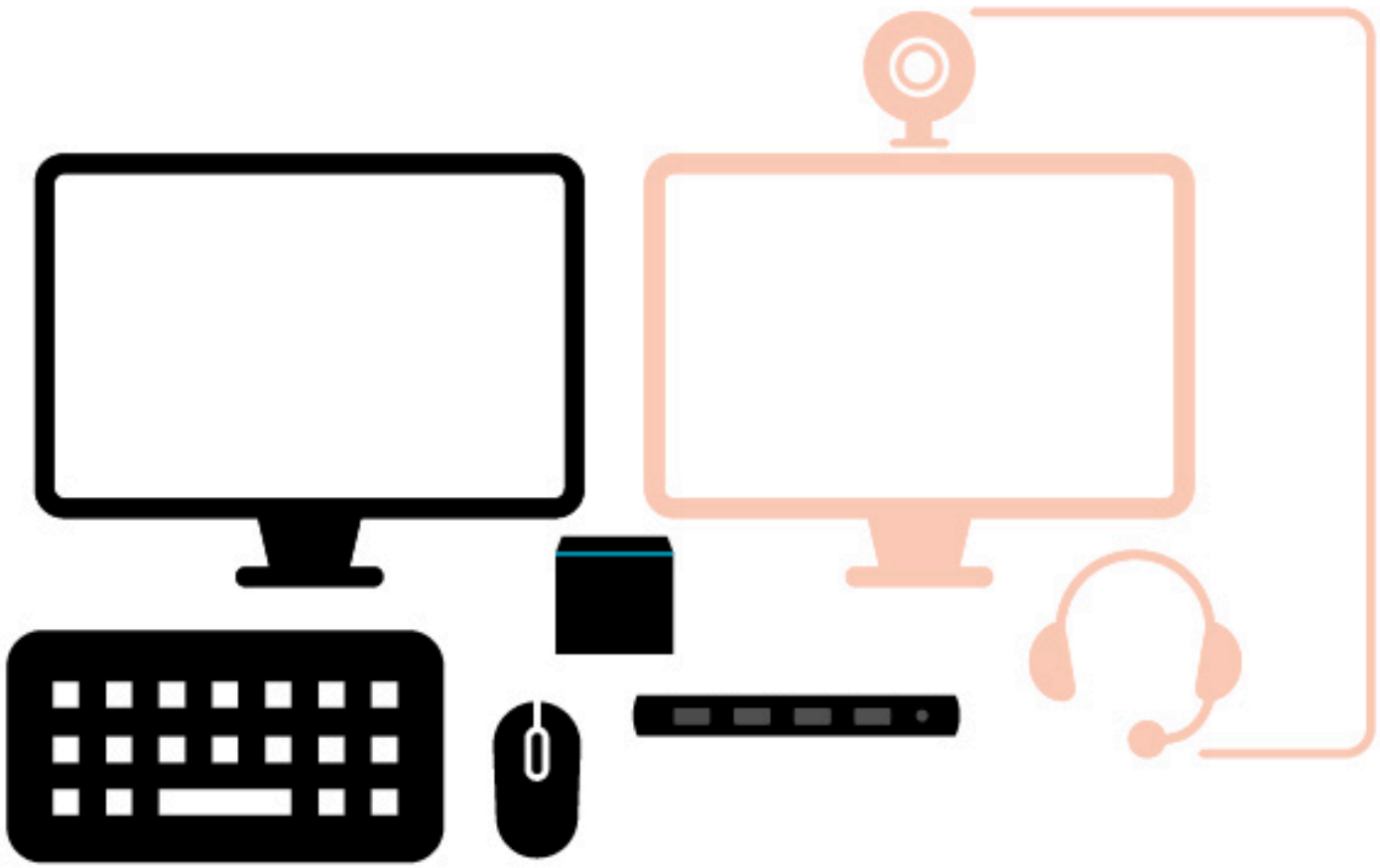
Note

Have your password ready if you use Wi-Fi to connect to your network.

You are now ready to set up your WorkSpaces Thin Client service. Go to Setting up your Amazon WorkSpaces Thin Client service.

Note

If you set up two monitors, the primary monitor must be placed on the left side and the secondary monitor on the right side.



Setting up your Amazon WorkSpaces Thin Client service

Your WorkSpaces Thin Client device is ready. You can now turn it on for the first time.

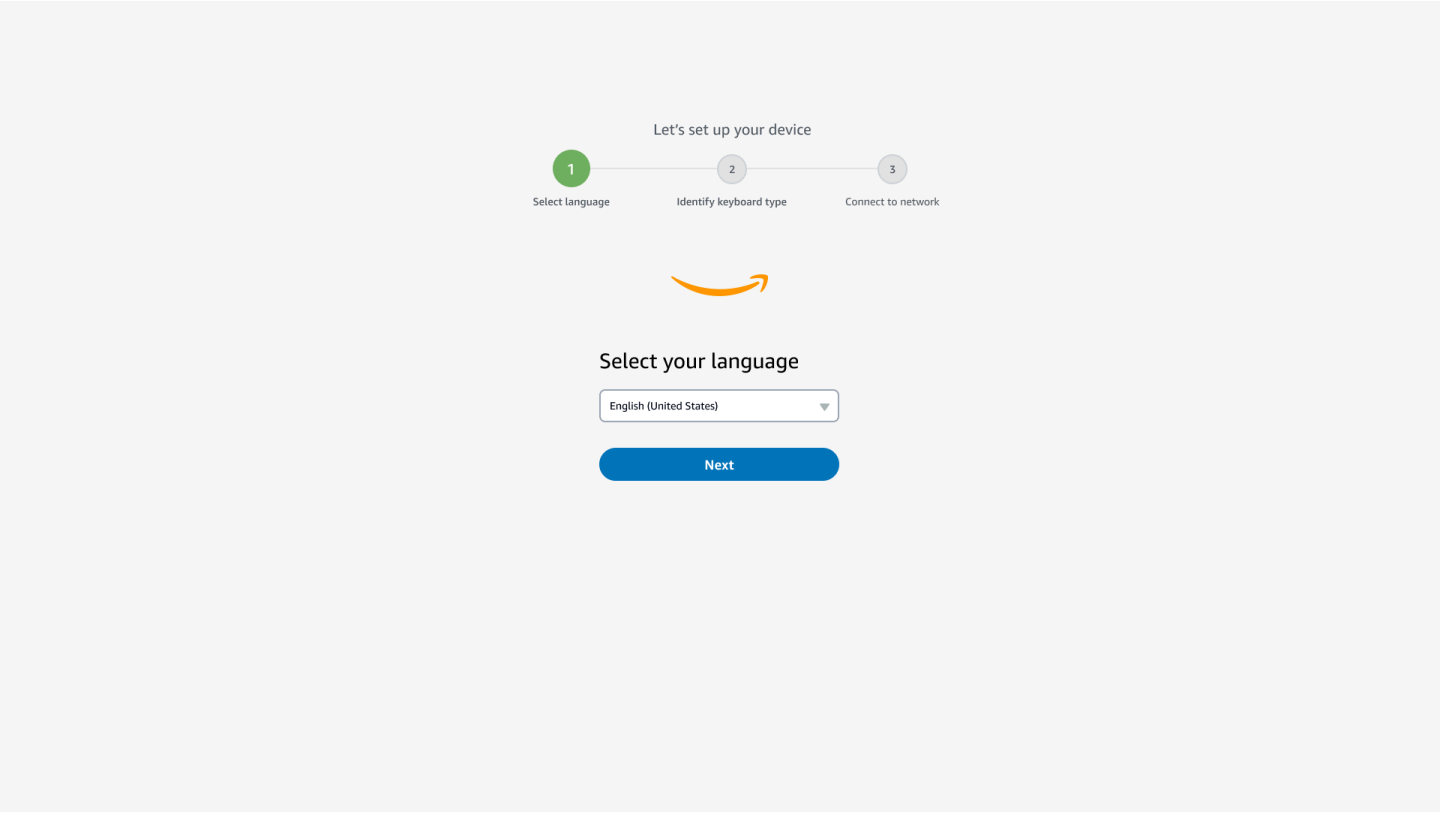
Because this is the first time you're turning on your WorkSpaces Thin Client device, you can follow a basic process to connect your new device to the service.

Your WorkSpaces Thin Client device guides you through this process.

Topics

Select your language

Select the language that you want your WorkSpaces Thin Client device to use.

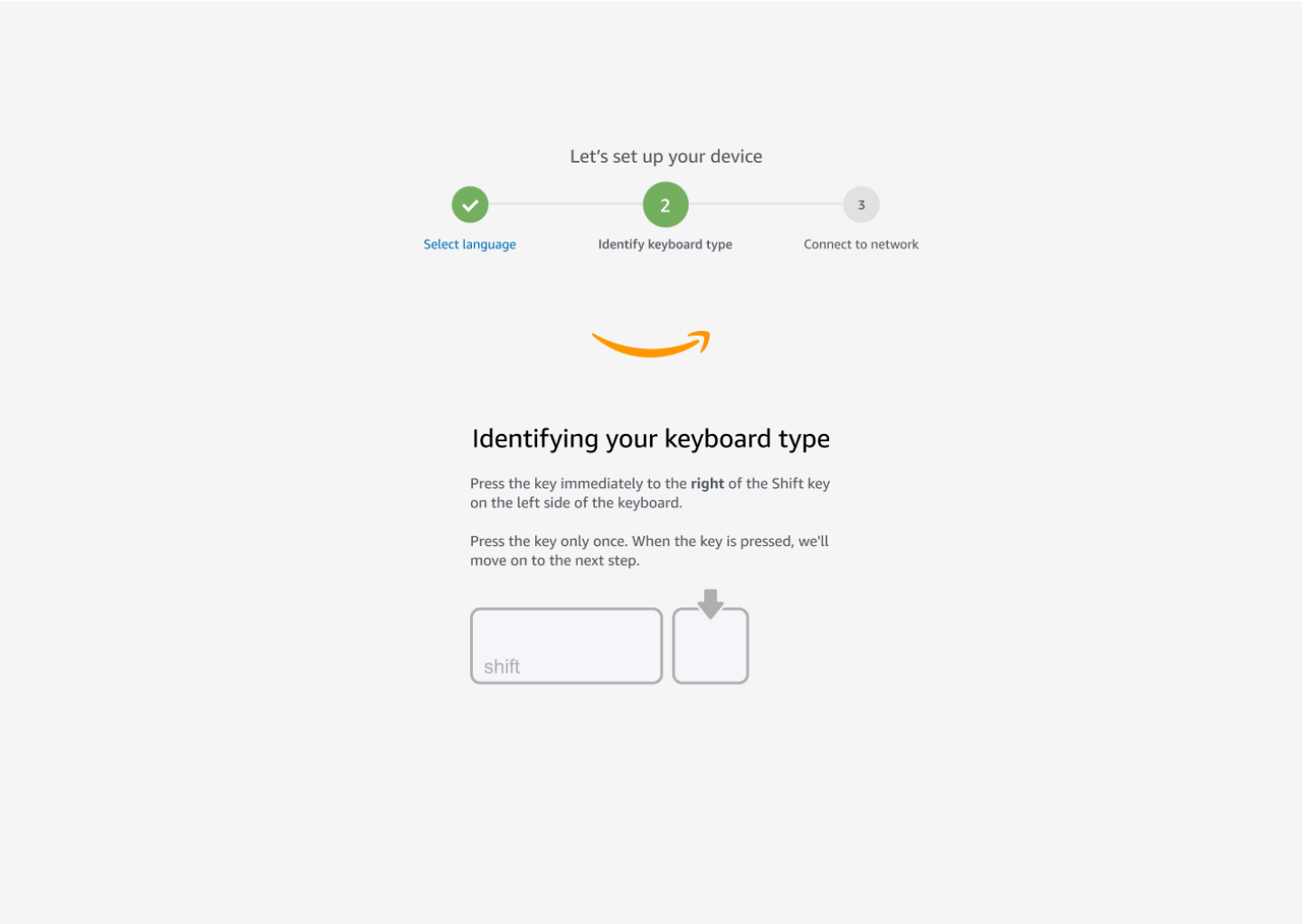


You can use your mouse to select a language.

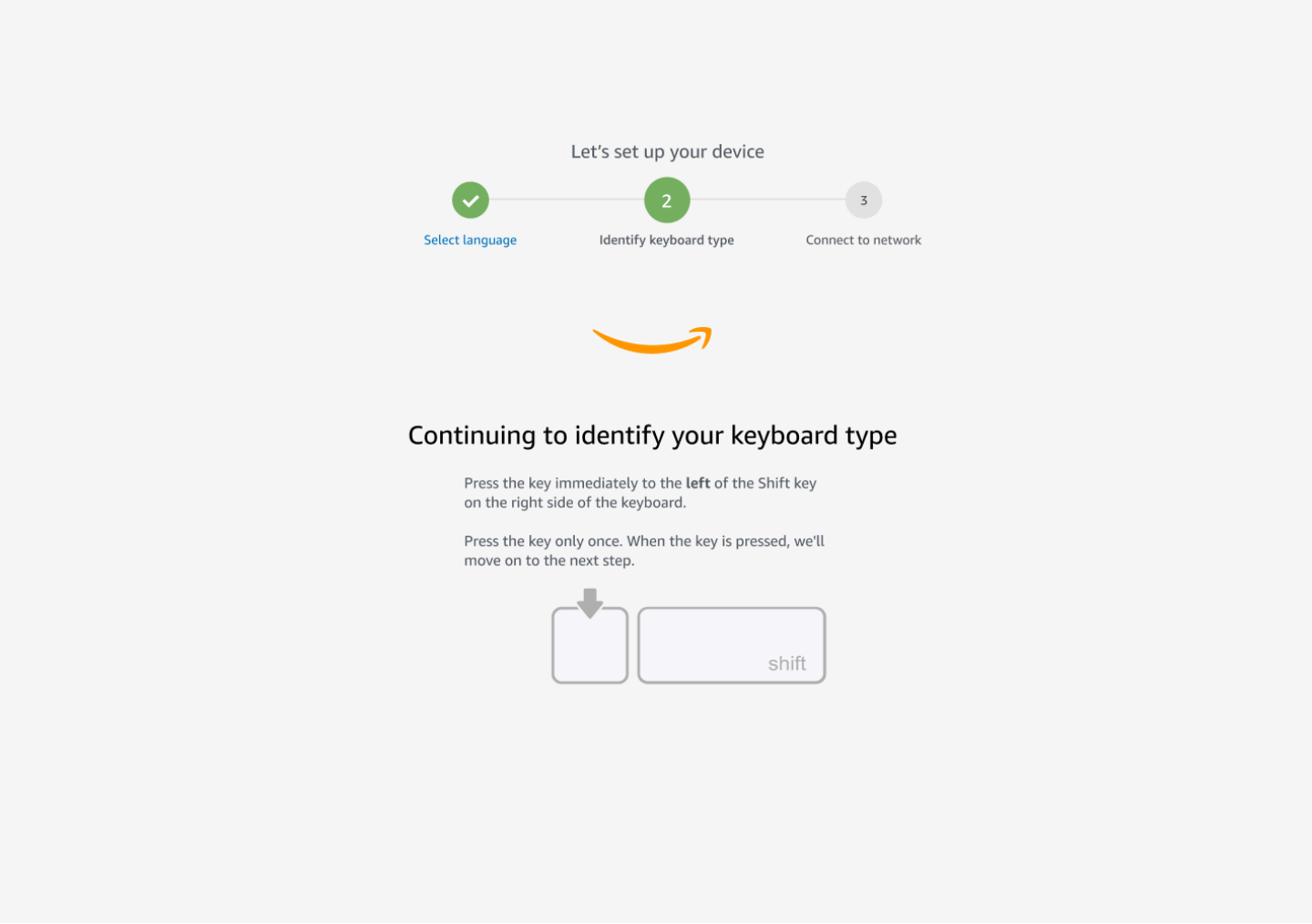
Identify keyboard type

Next, you tell the WorkSpaces Thin Client device to identify your keyboard.

Begin by pressing and holding the key to the immediate RIGHT of the **Shift** key on the LEFT side of the keyboard.



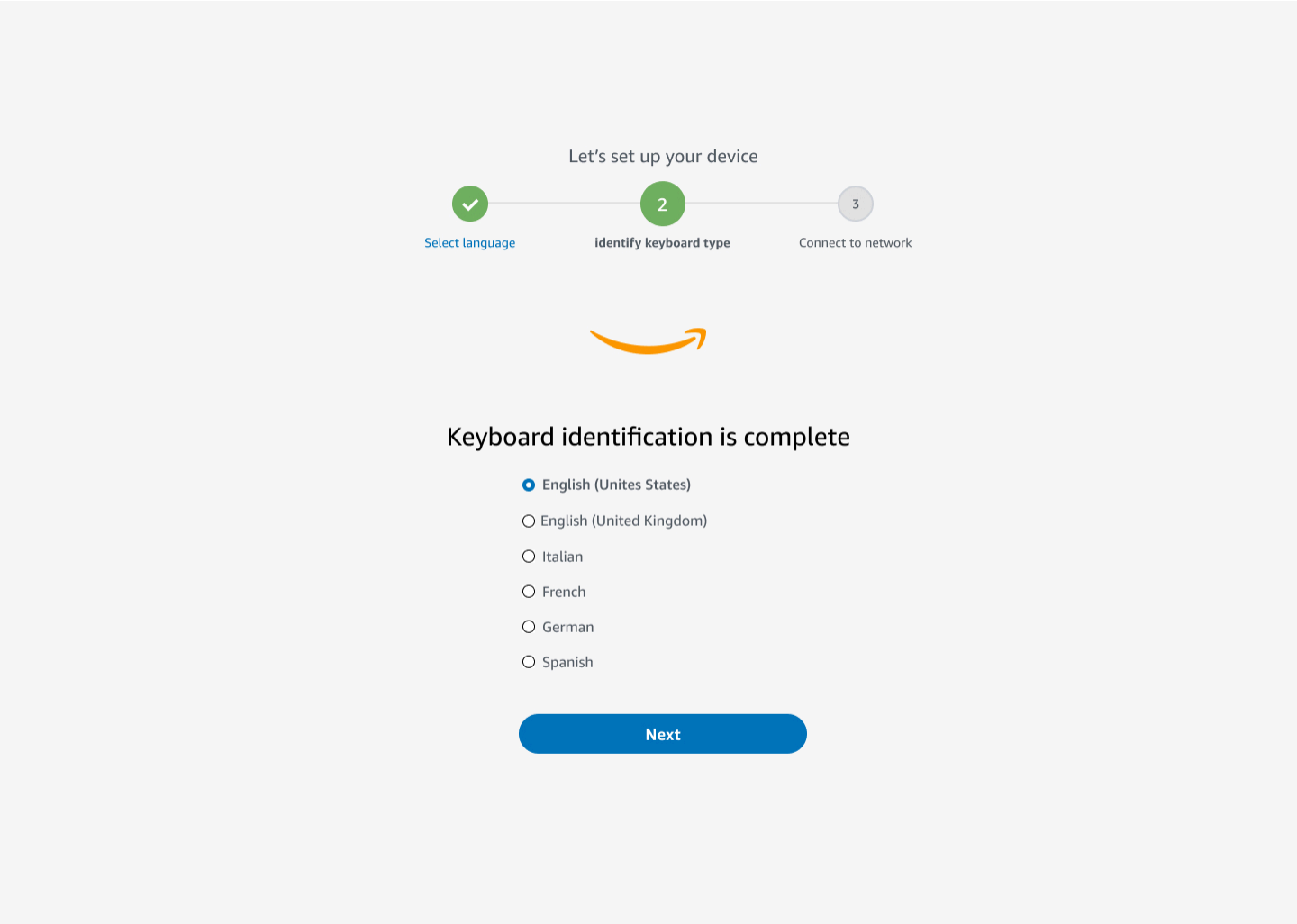
Next, press and hold the key to the immediate LEFT of the **Shift** key on the RIGHT side of the keyboard.



Great! The keyboard is now identified.

You now tell the WorkSpaces Thin Client device what type of keyboard you are using. Select your keyboard layout.

To verify your keyboard layout, see examples of each compatible keyboard in Keyboard layouts.

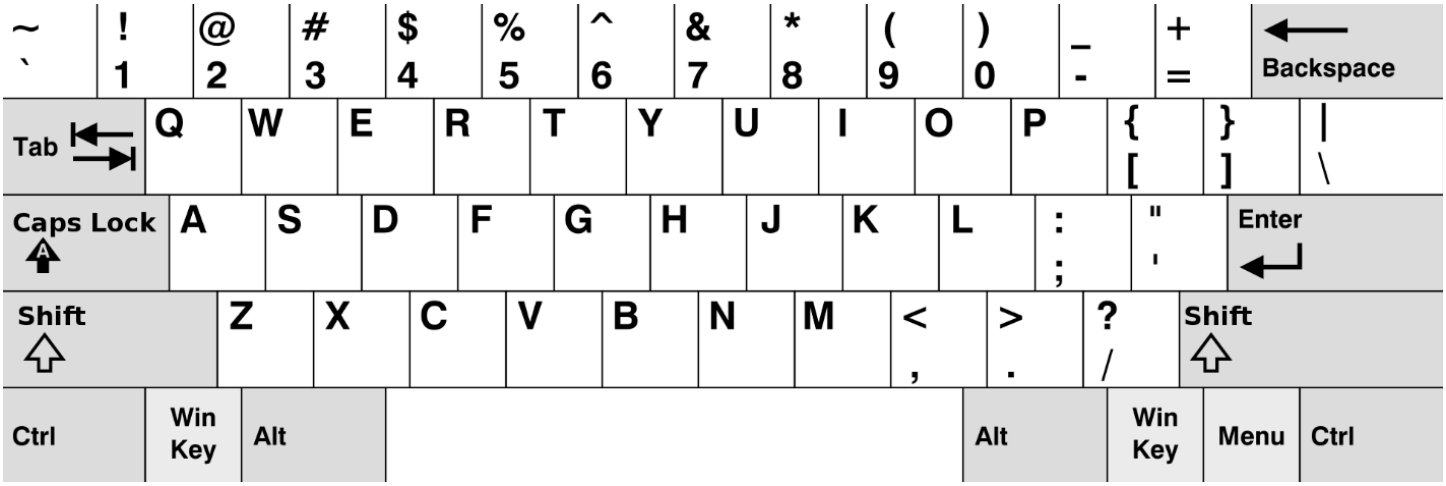


Keyboard layouts

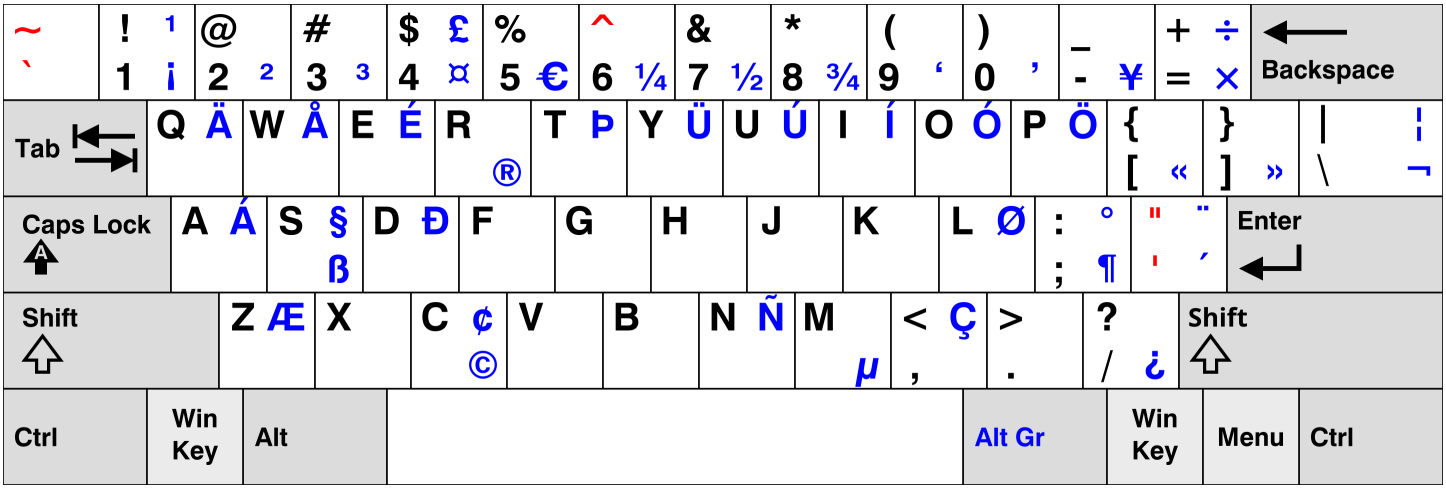
WorkSpaces Thin Client supports the following keyboard layouts in English (United Kingdom), English (United States - International), French (France), German (Germany), Spanish (Spain), Spanish (Latin America), and Italian (Italy).

WorkSpaces Thin Client supports **AltGr** and **dead key** keyboard layouts in English (United Kingdom), English (United States - International), French (France), German (Germany), Spanish (Spain), Spanish (Latin America), and Italian (Italy).

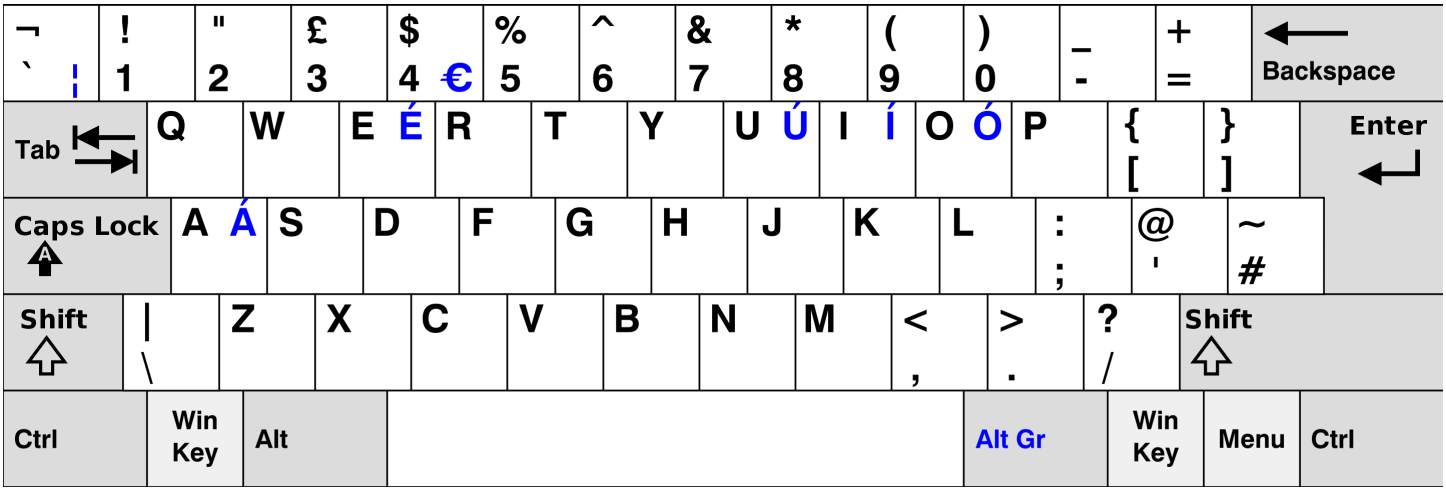
English (United States) keyboard layout



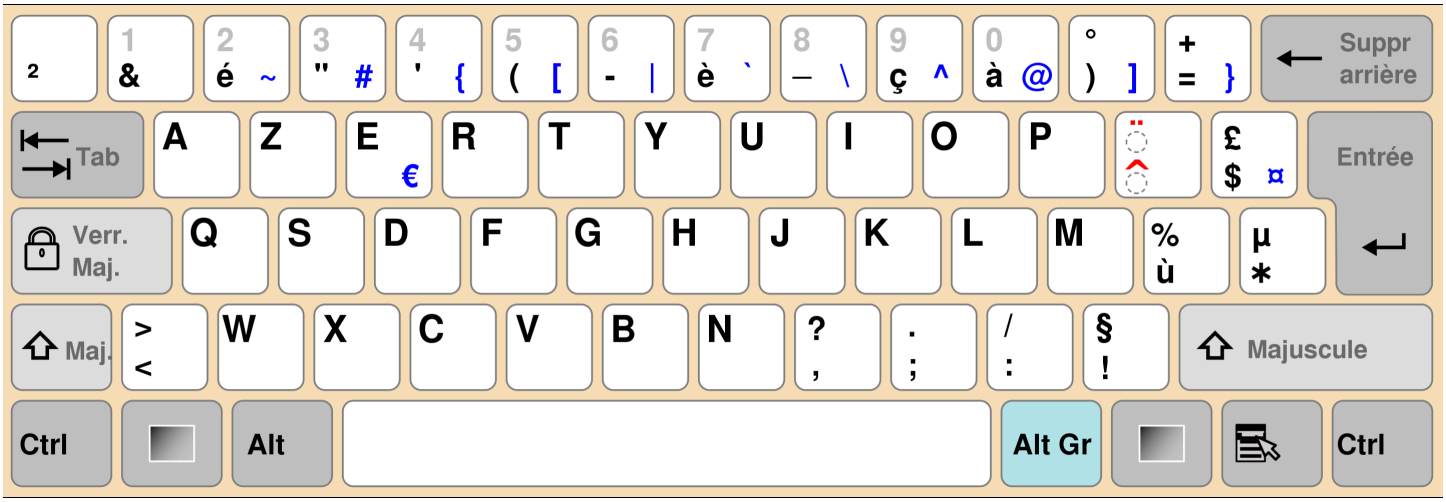
English (United States - International) keyboard layout



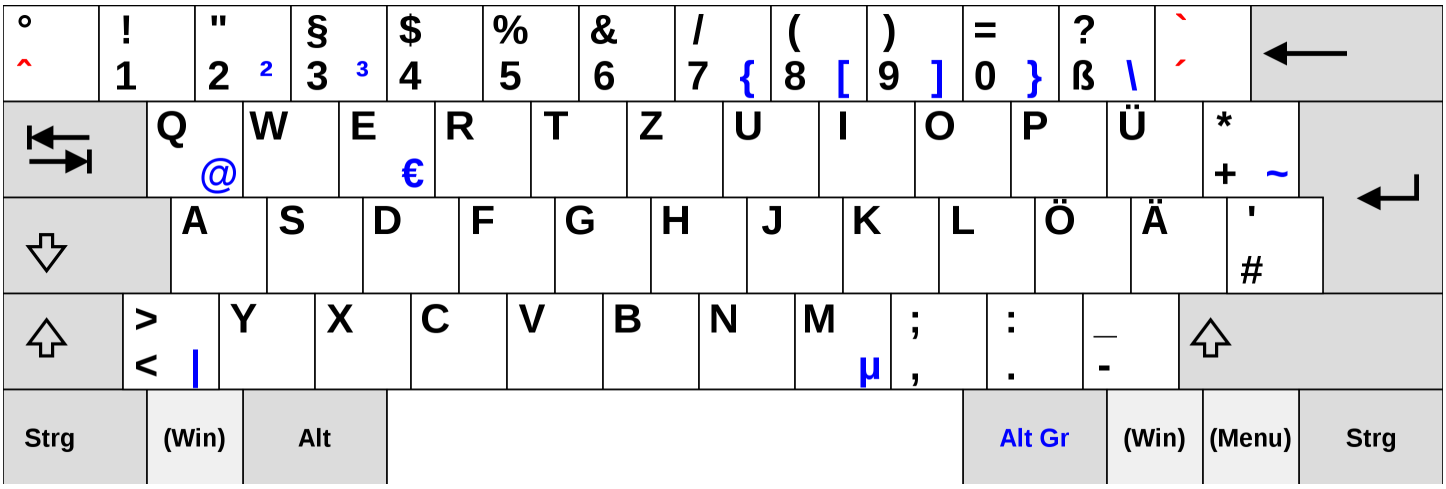
English (United Kingdom) keyboard layout



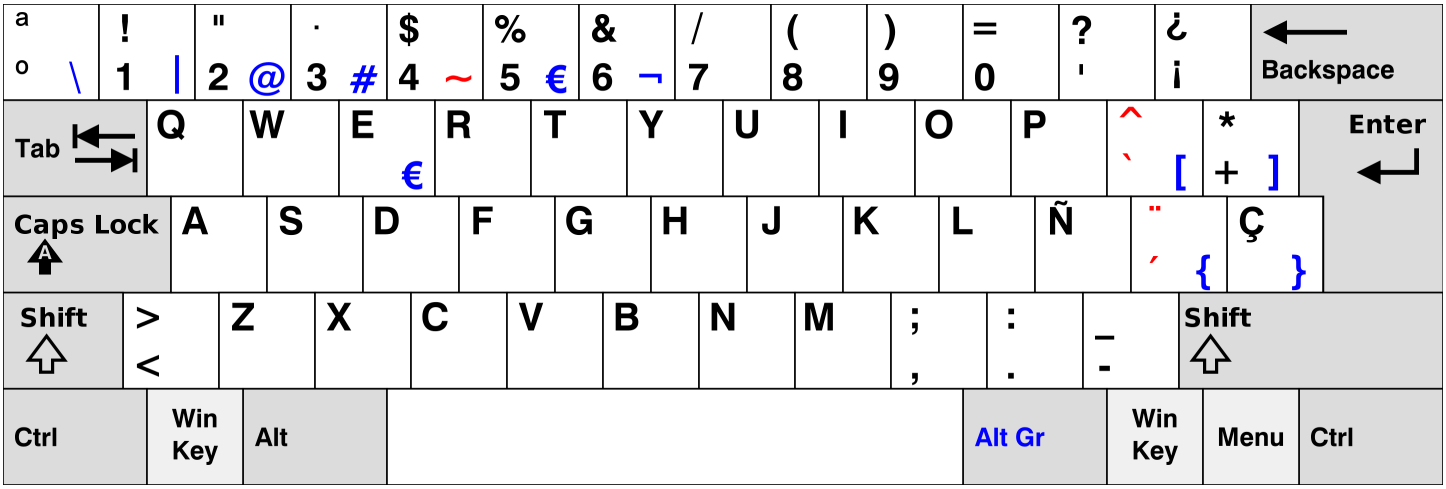
French (France) keyboard layout



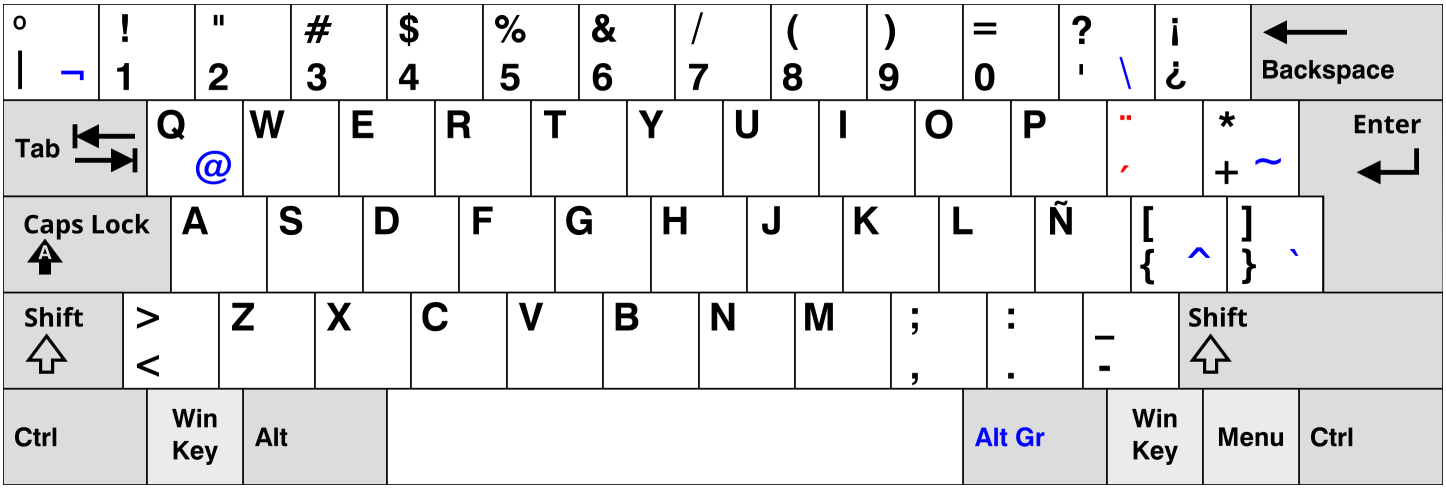
German (Germany) keyboard layout



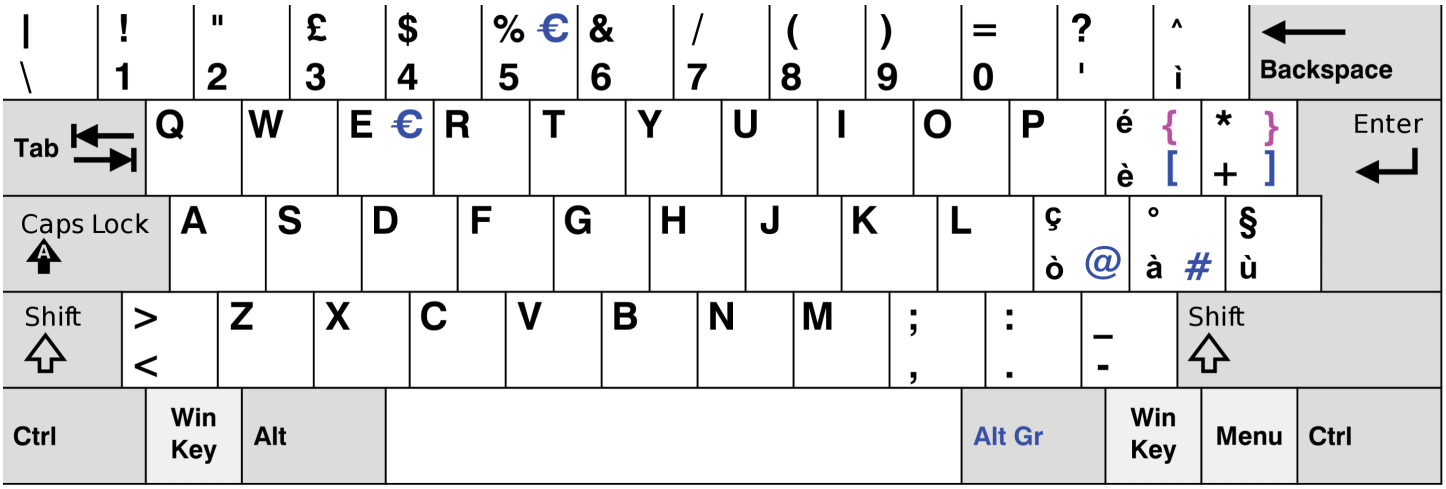
Spanish (Spain) keyboard layout



Spanish (Latin America) keyboard layout



Italian (Italy) keyboard layout



Connect to your network

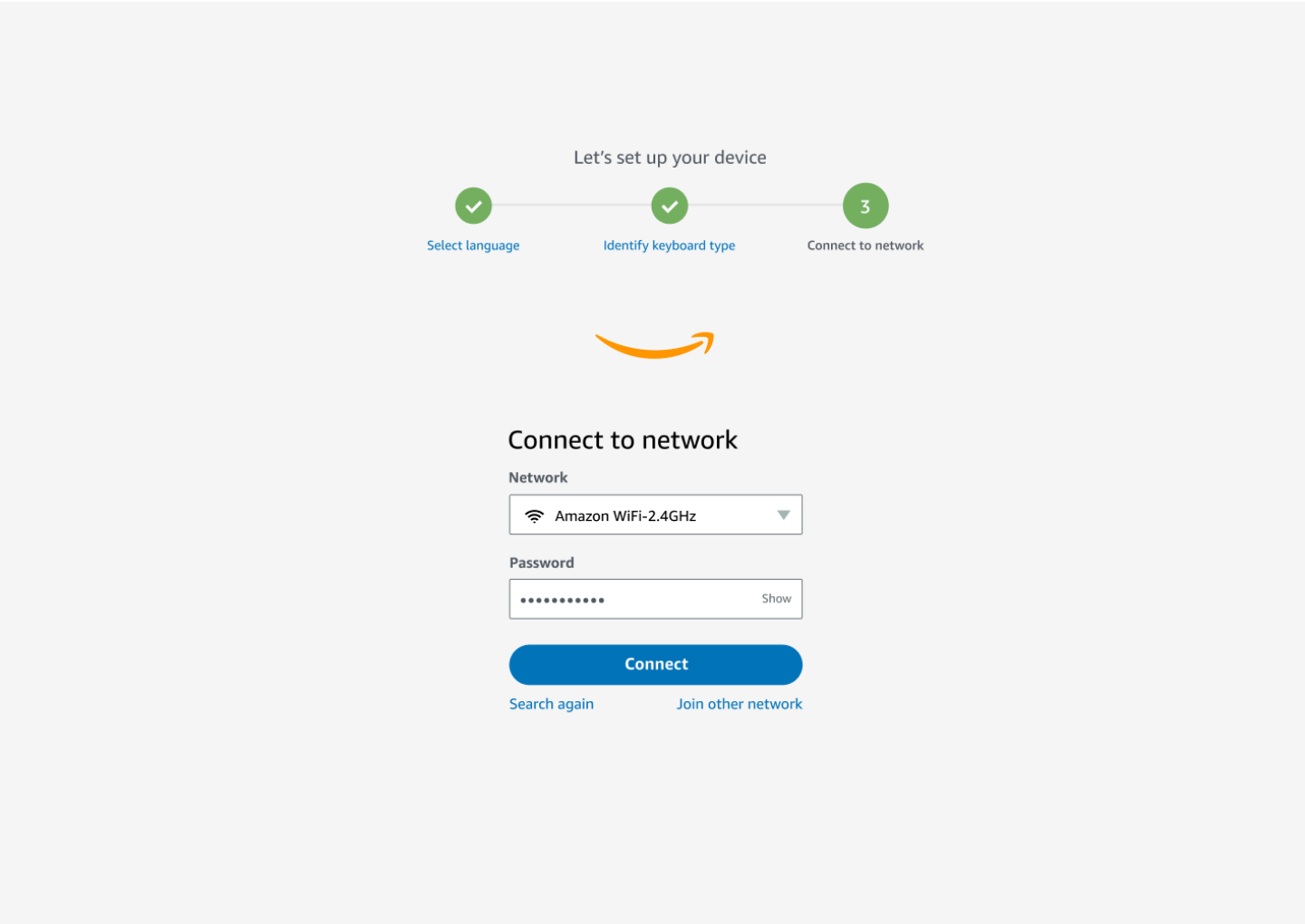
You can now connect your WorkSpaces Thin Client device to your network.

If you are using an Ethernet connection, then the WorkSpaces Thin Client device automatically connects to your network. No further action is required.

If your WorkSpaces Thin Client device is not connected through Ethernet, then your device will scan for available wireless networks and display them in the **Network** dropdown list. Select your network from this dropdown list.

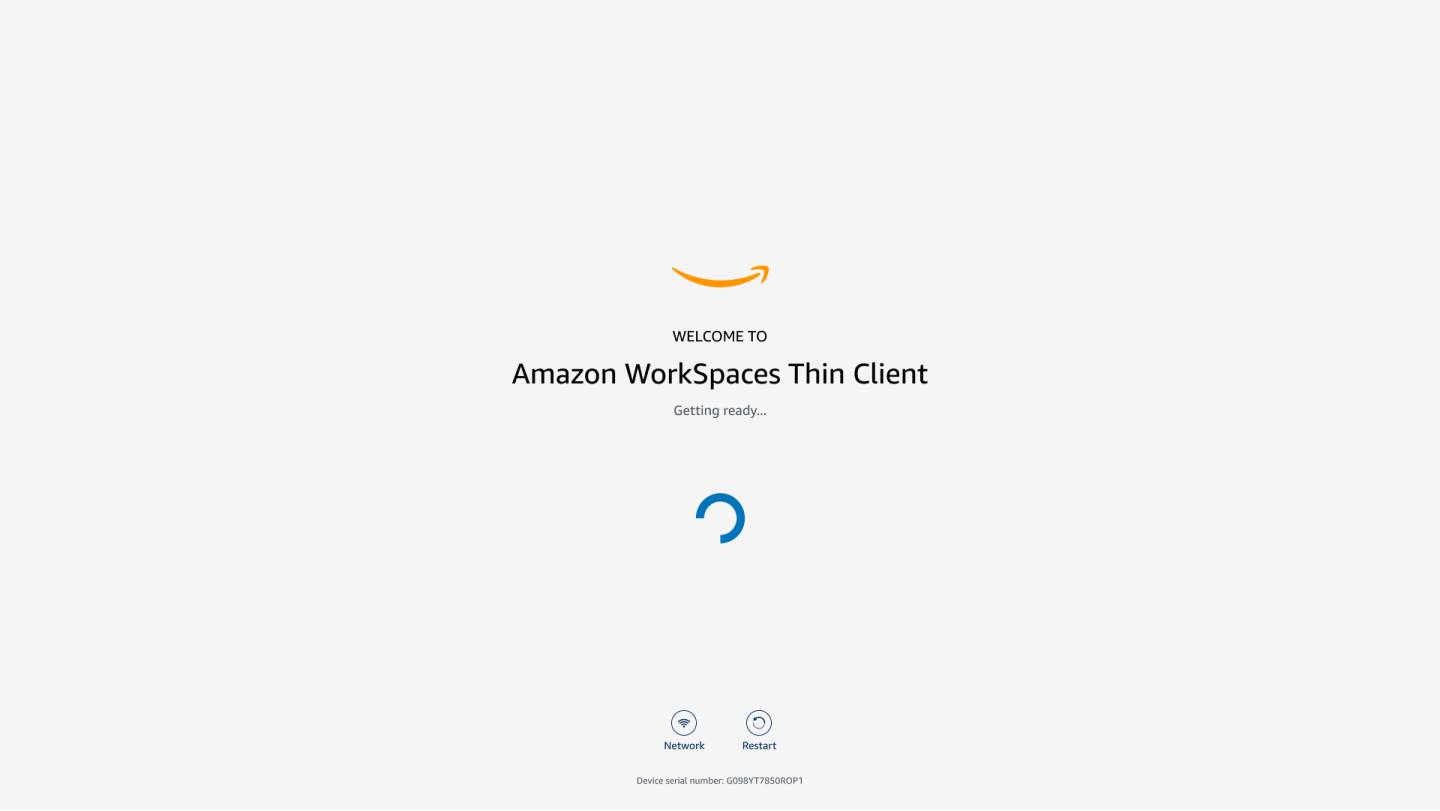
> **Note**
>
> Only one network connection type can be active. If you are using an Ethernet connection, then the wireless network connection cannot be used.

Enter your network password in the **Password** field.

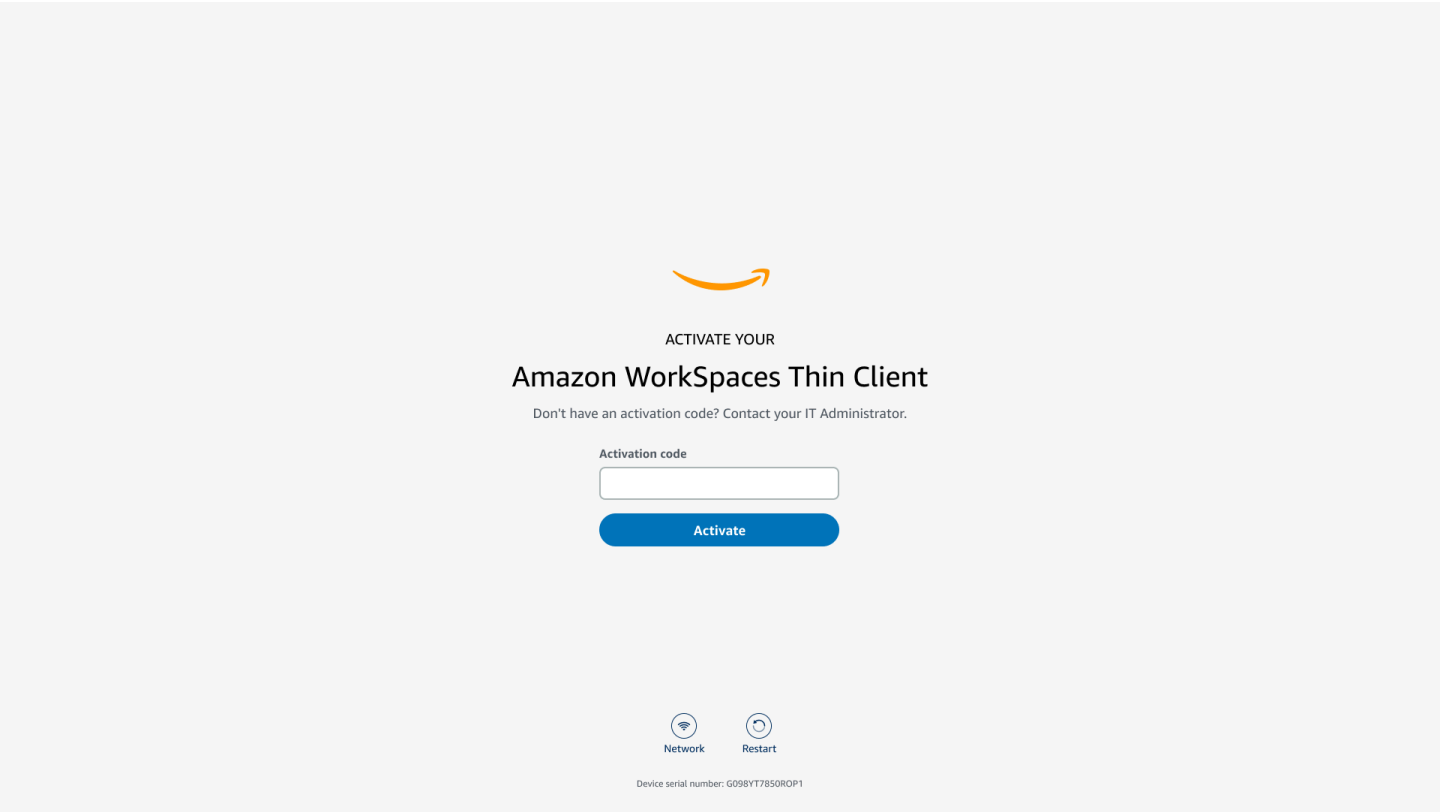


Enter activation code

Your WorkSpaces Thin Client device is now connected to your network. Now, you can connect your device to the AWS End User Computing service that your administrator set up for you.



Enter the activation code provided by your administrator.



Note

The activation code is generated when your administrator creates a dedicated environment for your device. For more information, see Creating an environment in the WorkSpaces Thin Client administrator guide.

Sign in to your AWS End User Computing service

Sign in to the AWS End User Computing service established for you by your administrator.

Note

The image shows WorkSpaces (web access). The service could be WorkSpaces (web access), AppStream 2.0, or WorkSpaces Secure Browser.

Using your WorkSpaces Thin Client device

After you have set up and registered your WorkSpaces Thin Client device, you are ready to use it.

Amazon WorkSpaces Thin Client is built to work with AWS End User Computing (EUC) virtual desktops and is compatible with a number of peripherals.

Topics

Using the toolbar

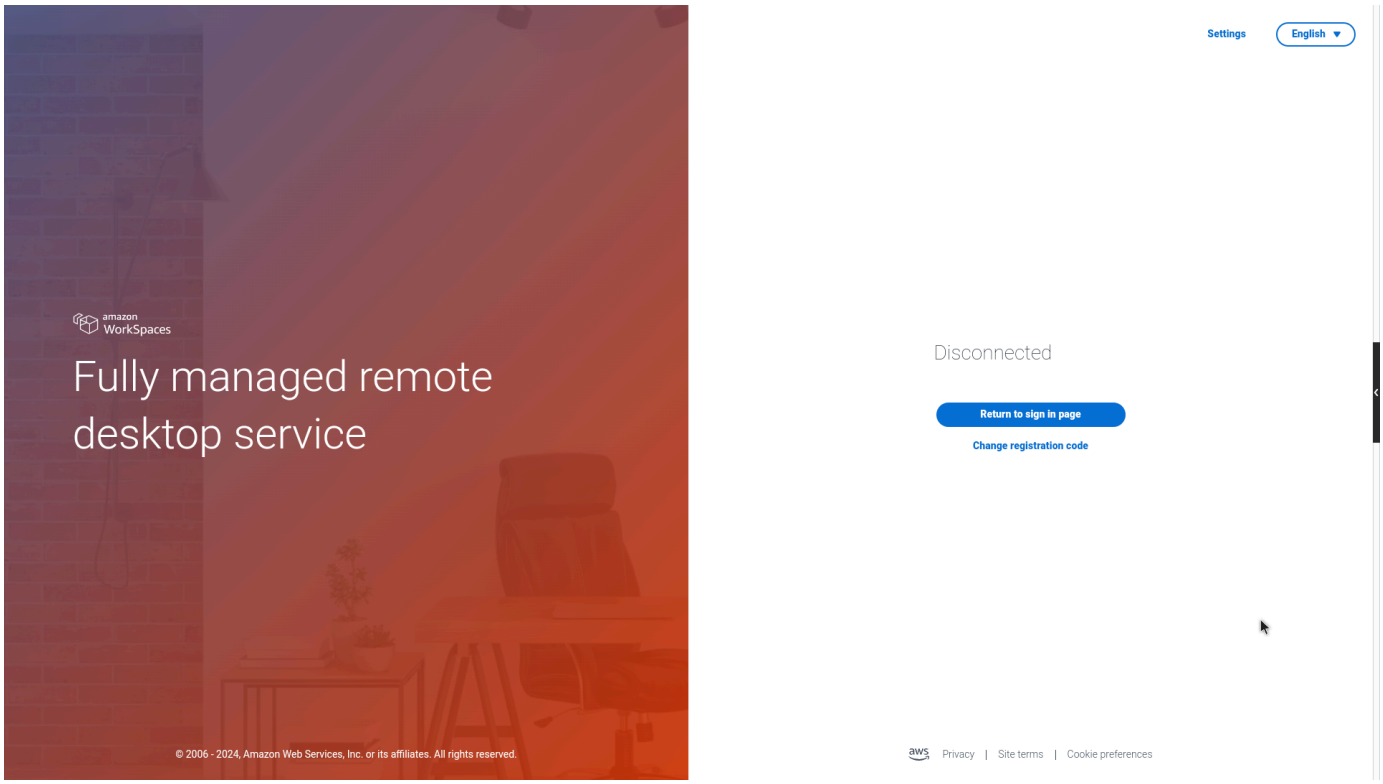
You can access all of WorkSpaces Thin Client device functions through a toolbar on your display. From this toolbar, you are able to control the basic settings of your WorkSpaces Thin Client device.

The toolbar, in its collapsed form, is located on the right side of your display represented as a dark bar.

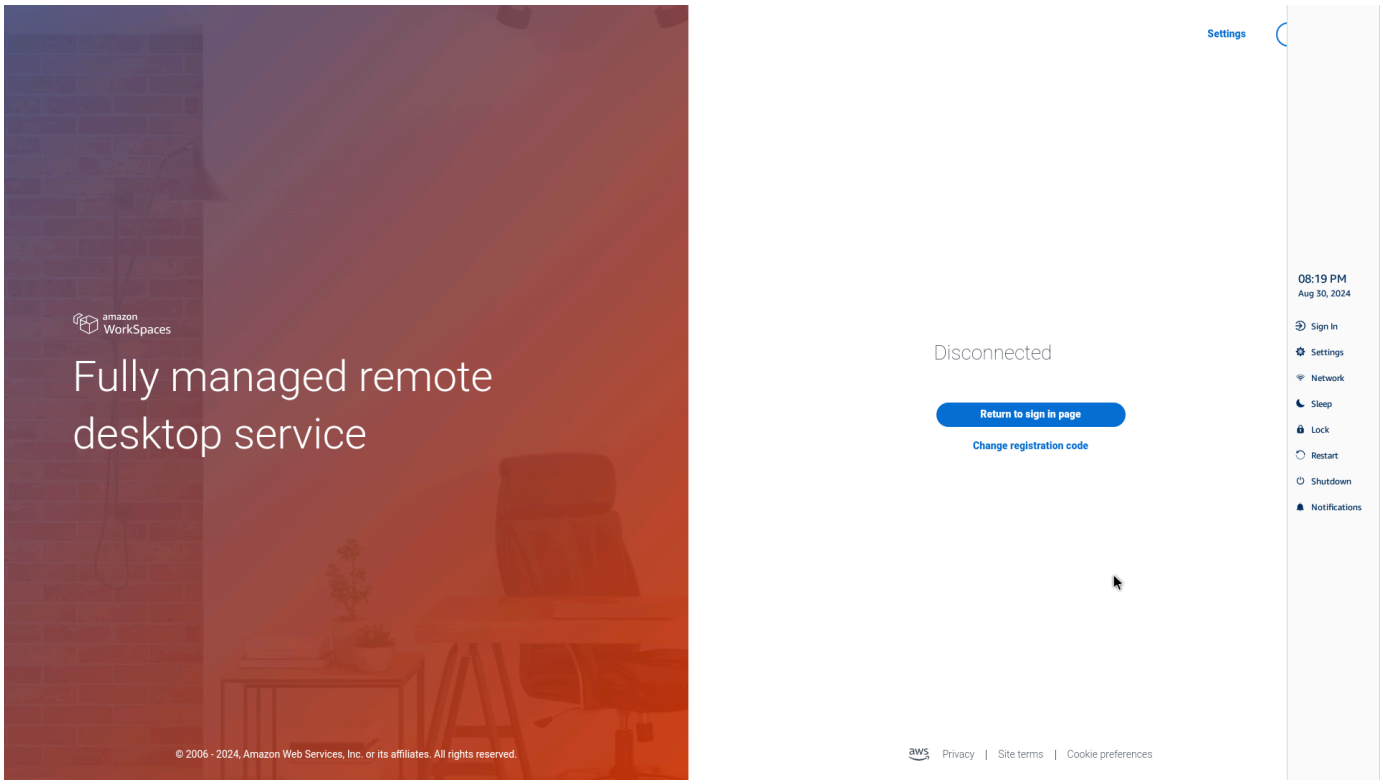
Accessing your toolbar

To access the toolbar functions, you need to expand it. Once expanded, the available functions will appear. The toolbar collapses once you are finished using it.

1. Select the dark bar on the right of your display.



2. Select the function you want to use. For a list of functions, see Toolbar functions.
3. Select any area on the primary display to collapse the toolbar.



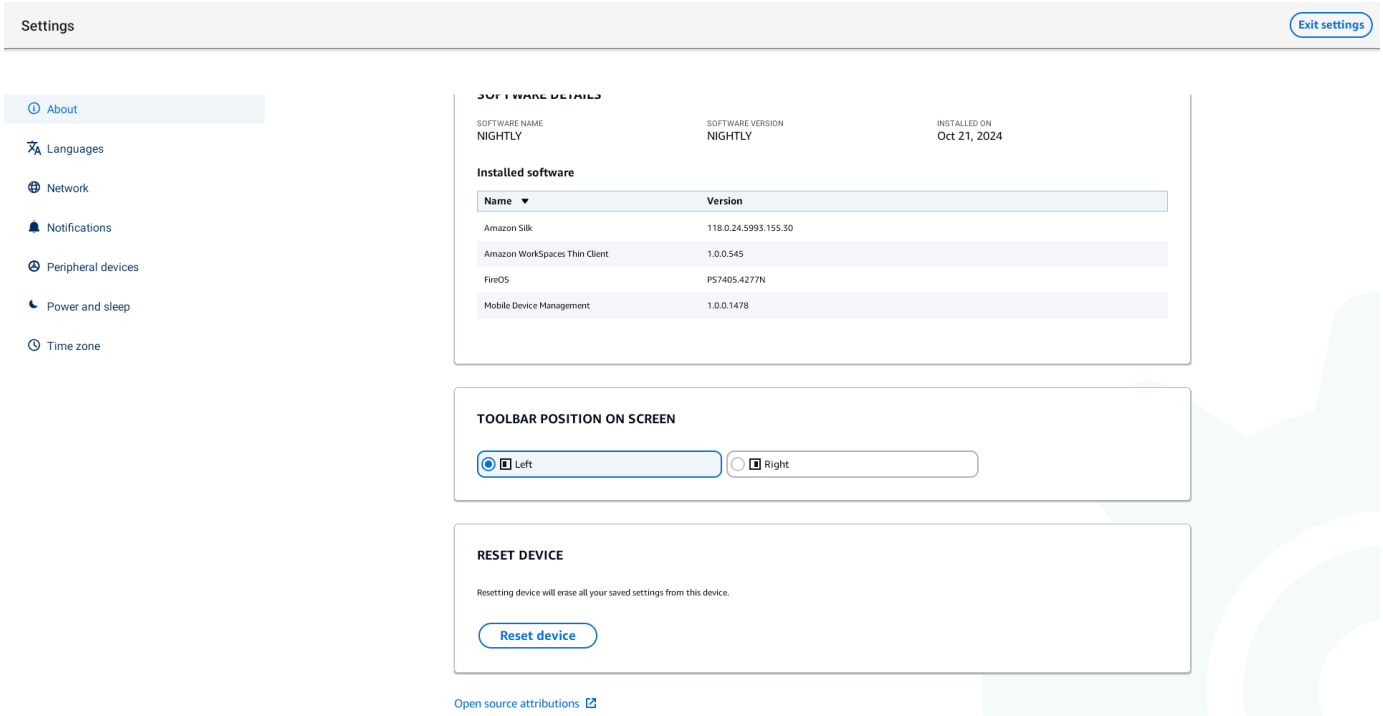
4. If you want to use your keyboard, press CTRL+ALT+SHIFT+T to expand or collapse the toolbar.

Positioning your toolbar

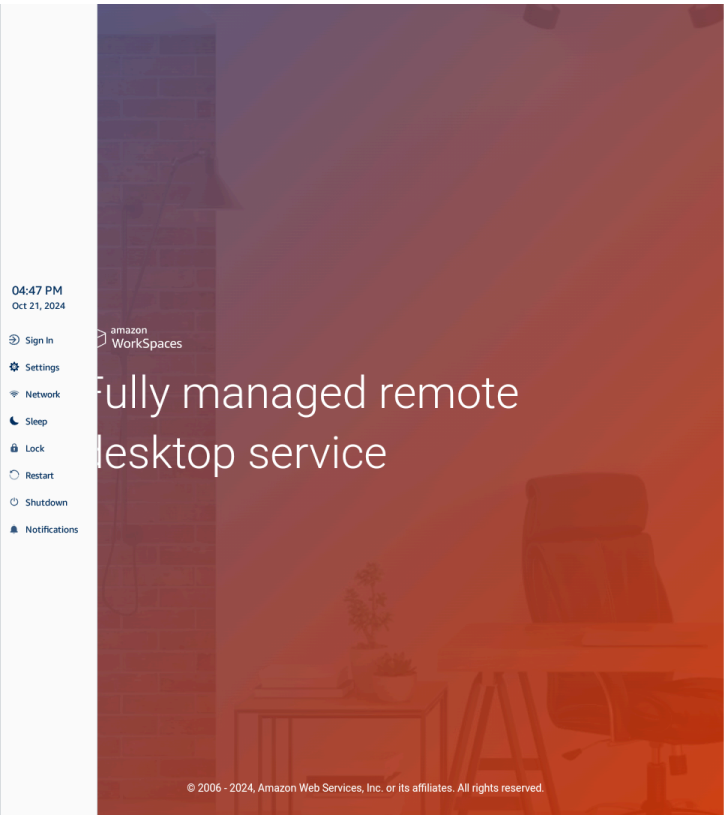
The toolbar is located on the side of your WorkSpaces Thin Client display. It is located along the right edge of the screen on your primary monitor by default. You can change the position of your toolbar.

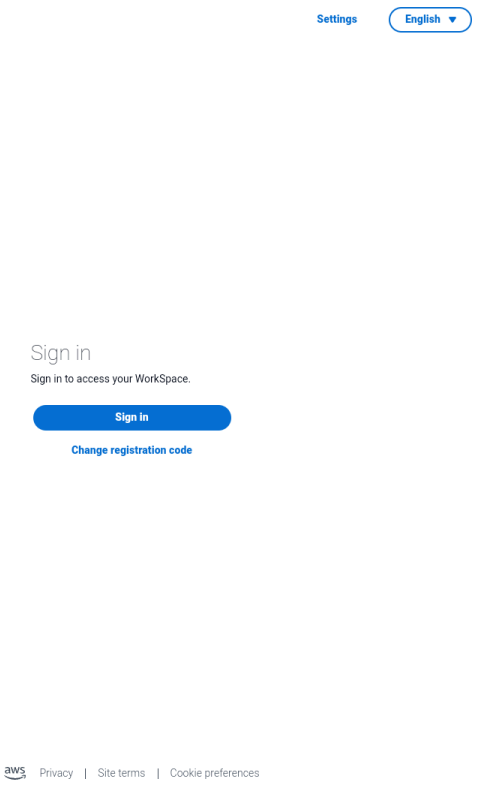
Changing your toolbar position

1. Go to **Settings** then **About**.
2. Go to the **Toolbar position on the screen** section.
3. Click on the switch to select either **Right** or **Left**.



The toolbar will show up along the edge of the screen on your primary monitor on the side your have selected.





Toolbar functions

When the toolbar is expanded, a list of functions is available for you to use. These are the basic settings of your WorkSpaces Thin Client device.

Button	Function	Description
Disconnect	Sign in/Disconnect	Selecting **Sign In** takes you to your virtual desktop session sign in page. You need to enter your virtual desktop session username and password to start a session. If you are using WorkSpaces, this function changes to **Disconnect**. Selecting **Disconnect** will sign you

Button	Function	Description
		out of your virtual desktop session. If you are using AppStream 2.0 or WorkSpaces Secure Browser, this function is removed from the toolbar. Use the **Disconnect** function within the virtual desktop to sign out of your session
	Settings	Accesses the settings for your device. These settings include: • About • Languages • Network • Notifications • Peripheral devices • Power and sleep • Time zone
	Network	Accesses the network settings of your device. For more information, see Managing networks.
	Sleep	Puts the device into Sleep mode. For more information, see Setting the Sleep mode.

Button	Function	Description
	Lock	Ends the current session and takes you to the lock page. Once locked, you can select **Unlock** to access your Sign In page.
	Restart	Restarts the device. For more information, see Rebooting by using the toolbar.
	Shutdown	Logs you out of the session and shuts down the device.
	Notifications	Accesses the Notifications for your device.

Using shortcuts on Windows keyboards

WorkSpaces Thin Client has the capability to use keyboard shortcuts for some of its functions. The following table shows the enabled shortcuts and their associated functions.

> **Note**
>
> This features is available for Windows sessions only.

Keyboard shortcut	Device function
Windows logo key + Shift + S	Create part of the screen screenshot.
Windows logo key + Ctrl + Enter	Turn Windows Narrator on and off.
Windows logo key + Plus(+)	Zoom in using the Magnifier.
Windows logo key + Left arrow	Snap app or window left.

Keyboard shortcut	Device function
Windows logo key + Right arrow	Snap app or window right.
Windows logo key + Up arrow	Maximize app windows.
Windows logo key + Down	Minimize app windows.
Windows logo key + D	Display and hide the desktop.

Using the virtual service provider interface

WorkSpaces Thin Client is powered by the Amazon DCV web client, which runs inside a web browser, so no installation is required.

For more information about Amazon DCV, see Using Amazon DCV.

Amazon WorkSpaces Thin Client works with a number of virtual desktops to provide you with a complete cloud desktop solution. Each VDI has its own interface or toolbar that you will use.

For more information on each of these interfaces, please see the following:

- For Amazon WorkSpaces see WorkSpaces Web Access
- For AppStream 2.0 see Web Browser Access
- For Amazon WorkSpaces Secure Browser see Use the toolbar

Enabling the microphone and webcam

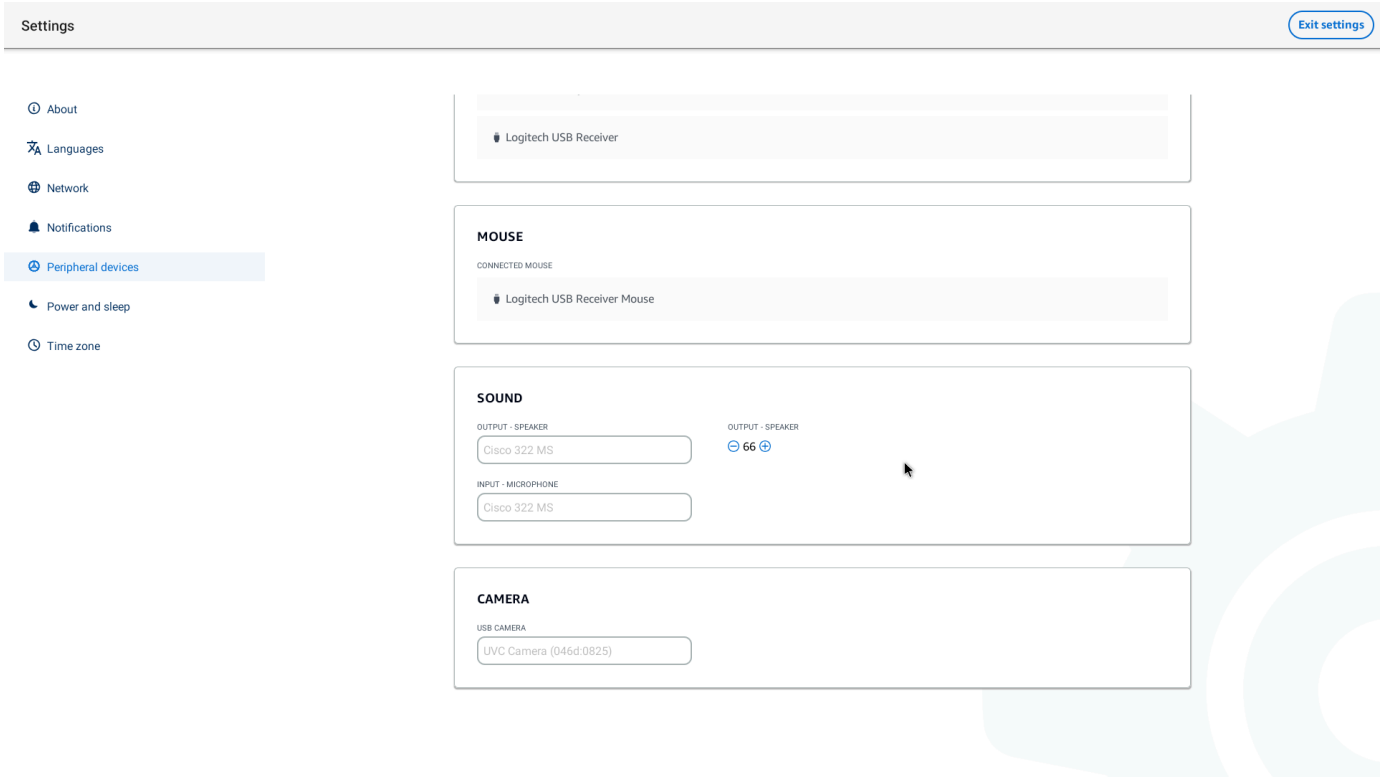
Your WorkSpaces Thin Client device can connect to your audio and visual devices. To use your microphone and webcam within a virtual desktop session, you will need to enable permissions in your Windows Settings, on the virtual desktop toolbar, and your browser settings.

WorkSpaces Thin Client is compatible with the webcams and headsets listed in the Peripherals section.

Confirm your webcam and microphone are properly connected to your WorkSpaces Thin Client.

1. Go to **Settings**.

2. Select **Peripheral Devices**.
3. Verify that your webcam and microphone are listed.

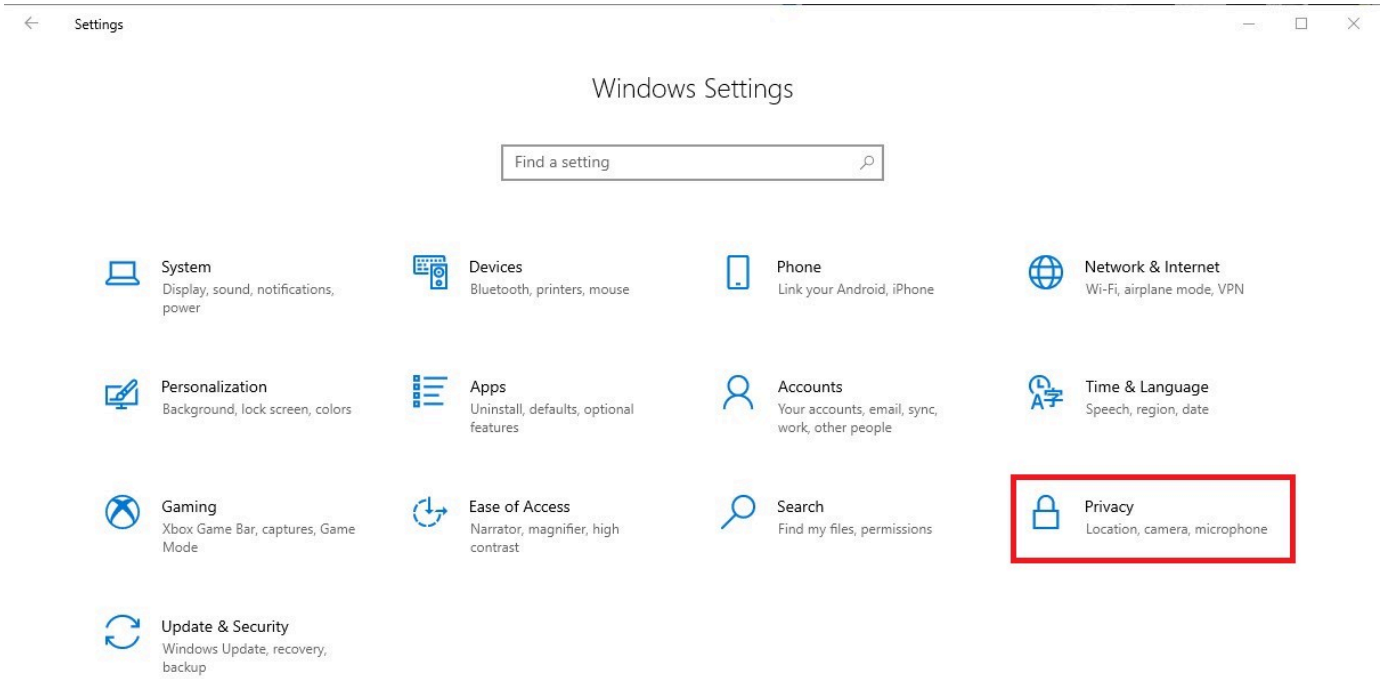


4. Verify that your microphone and webcam are enabled on your VDI. Depending on what VDI you are using, do one of the following:
   - For Windows, use Enabling permissions in Windows.
   - For Amazon WorkSpaces, use Enabling permissions in Amazon WorkSpaces.
   - For AppStream 2.0 or Amazon WorkSpaces Secure Browser, use Enabling permissions in AppStream 2.0 and Amazon WorkSpaces Secure Browser.

Enabling permissions for microphone and webcam in the VDI

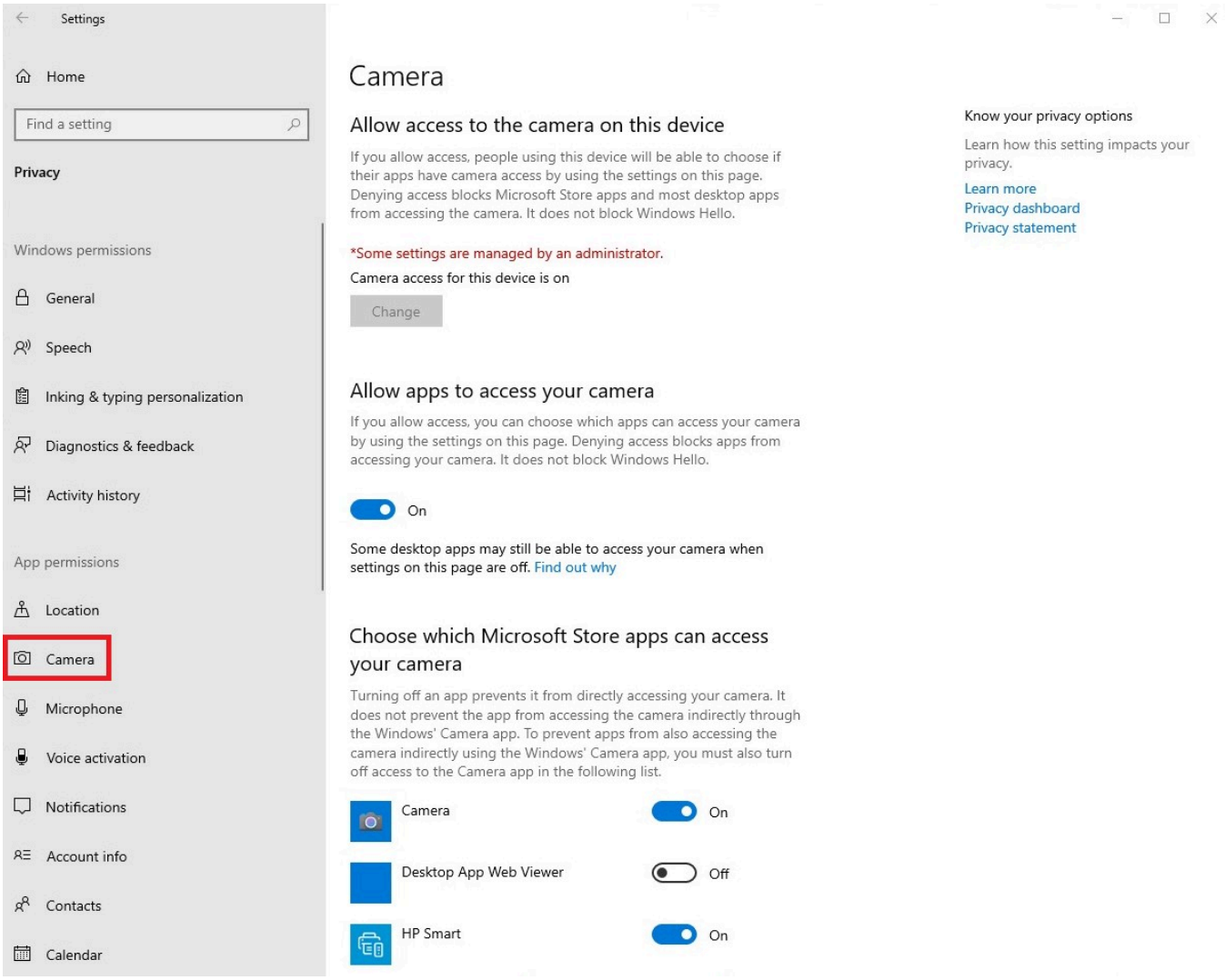
Enabling permissions in Windows

1. Select the **Settings** icon.
2. Select the **Privacy** icon from the **Settings** menu.

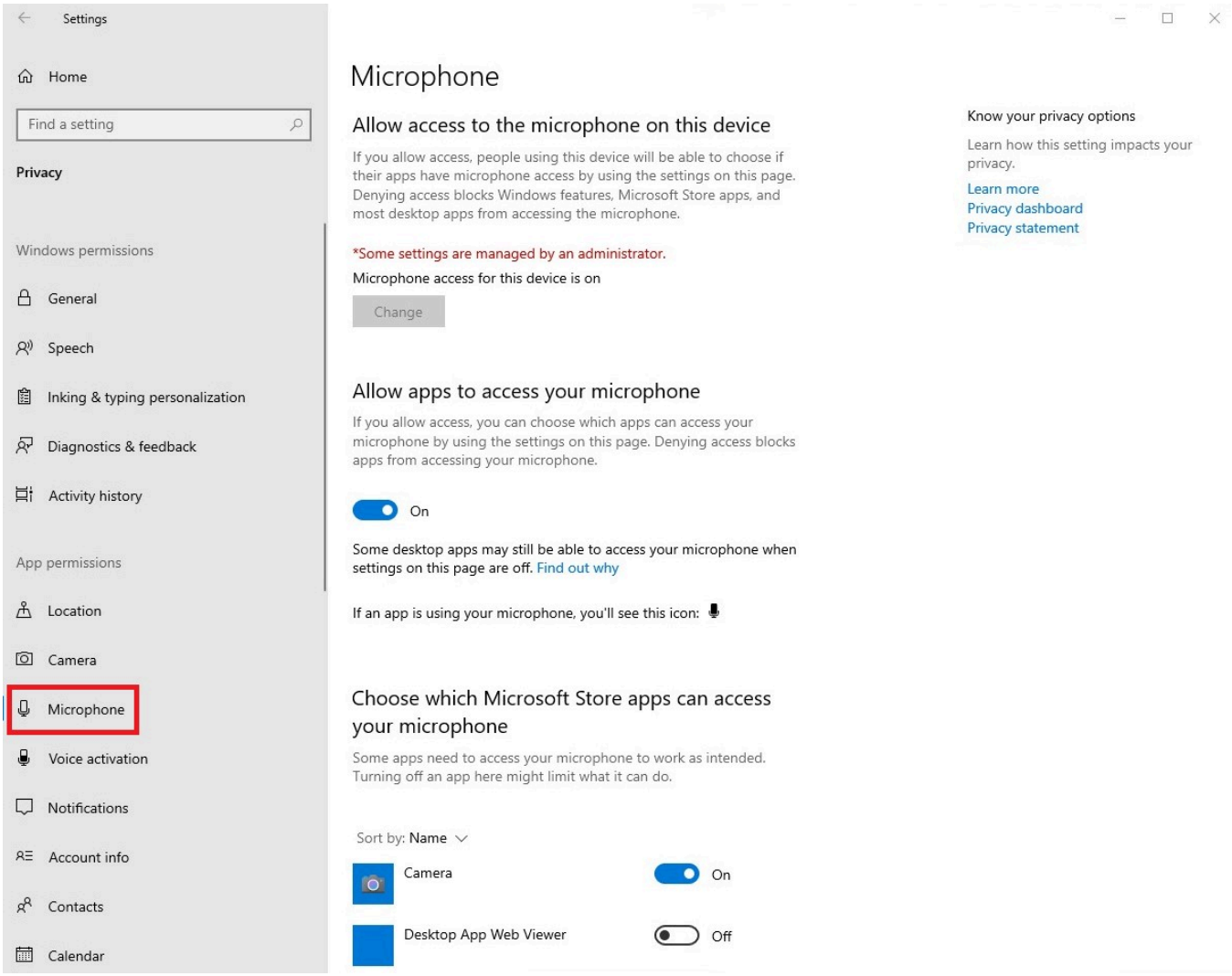


3. Do one of the following:

   - Select **Camera** from the list on the left, and change **Allow apps to access your camera** to **On**.



- Select **Microphone** from the list on the left, and change **Allow apps to access your camera** to **On**.



After you have enabled permissions in Windows, you will need to enable them from your web browser. See Enabling permissions in the web browser.

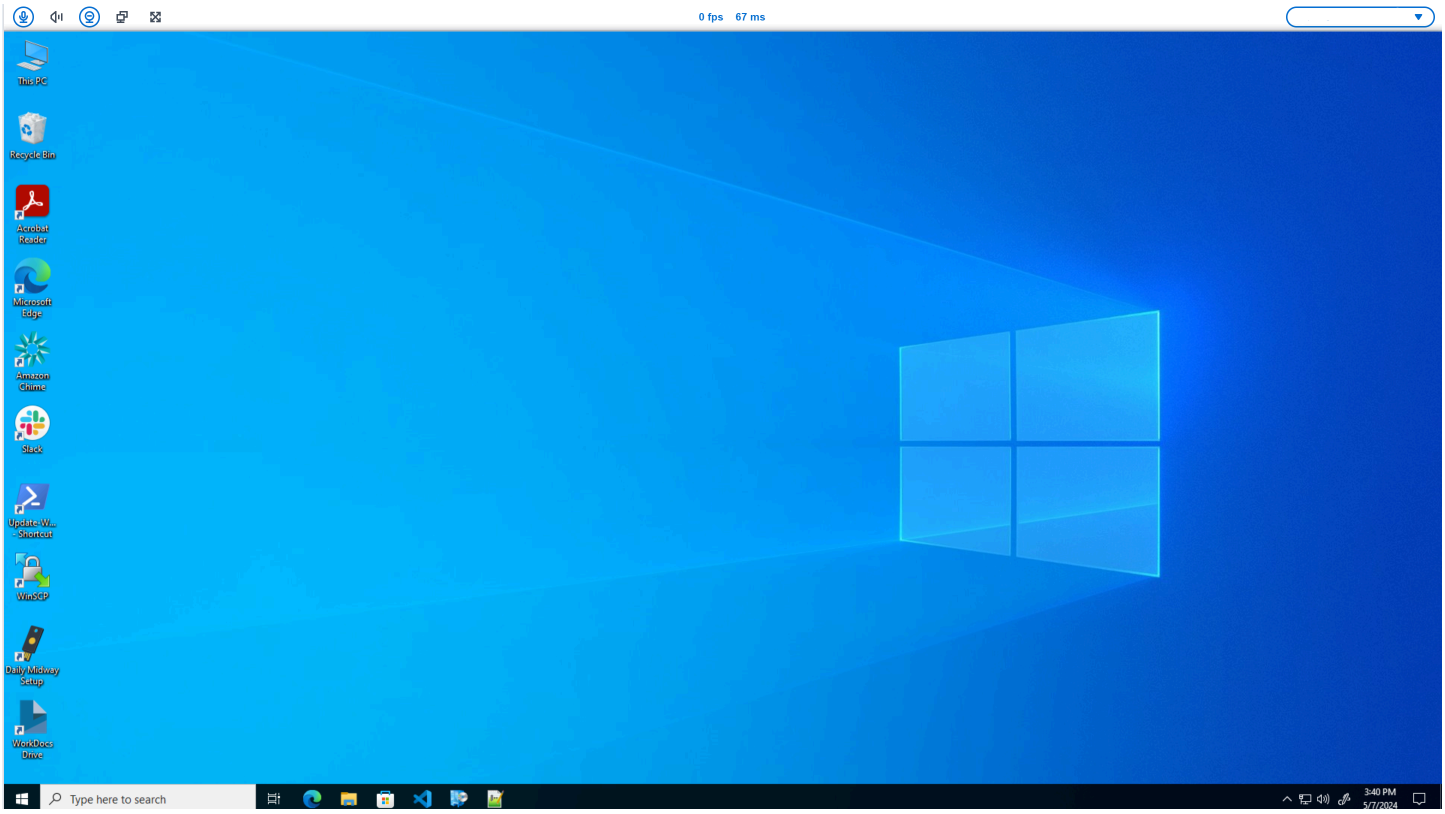
Enabling permissions in Amazon WorkSpaces

Permissions for webcam and microphone are automatically enabled for use with WorkSpaces Thin Client.

The virtual desktop toolbar will display the status of you microphone and webcam.

WorkSpaces Thin Client is compatible with the webcams and headsets listed in the Peripherals section.

Confirm your webcam and microphone are properly connected to your WorkSpaces Thin Client.



The icons for **Microphone** and **Webcam** will indicate their status.

Icon	Status
	Camera is not on.
	Camera is on but not streaming.
	Camera is on and streaming.
	Microphone is not on.

Icon	Status	
	Microphone is on.	

After you have confirmed that your peripheral is enabled in Amazon WorkSpaces, you will need to enable them from your web browser. See Enabling permissions in the web browser

Enabling permissions in AppStream 2.0 and Amazon WorkSpaces Secure Browser

Your WorkSpaces Thin Client device can connect to your audio and visual devices. To use your microphone and webcam within a virtual desktop session, you will need to enable permissions in your Windows Settings, on the virtual desktop toolbar, and your browser settings.

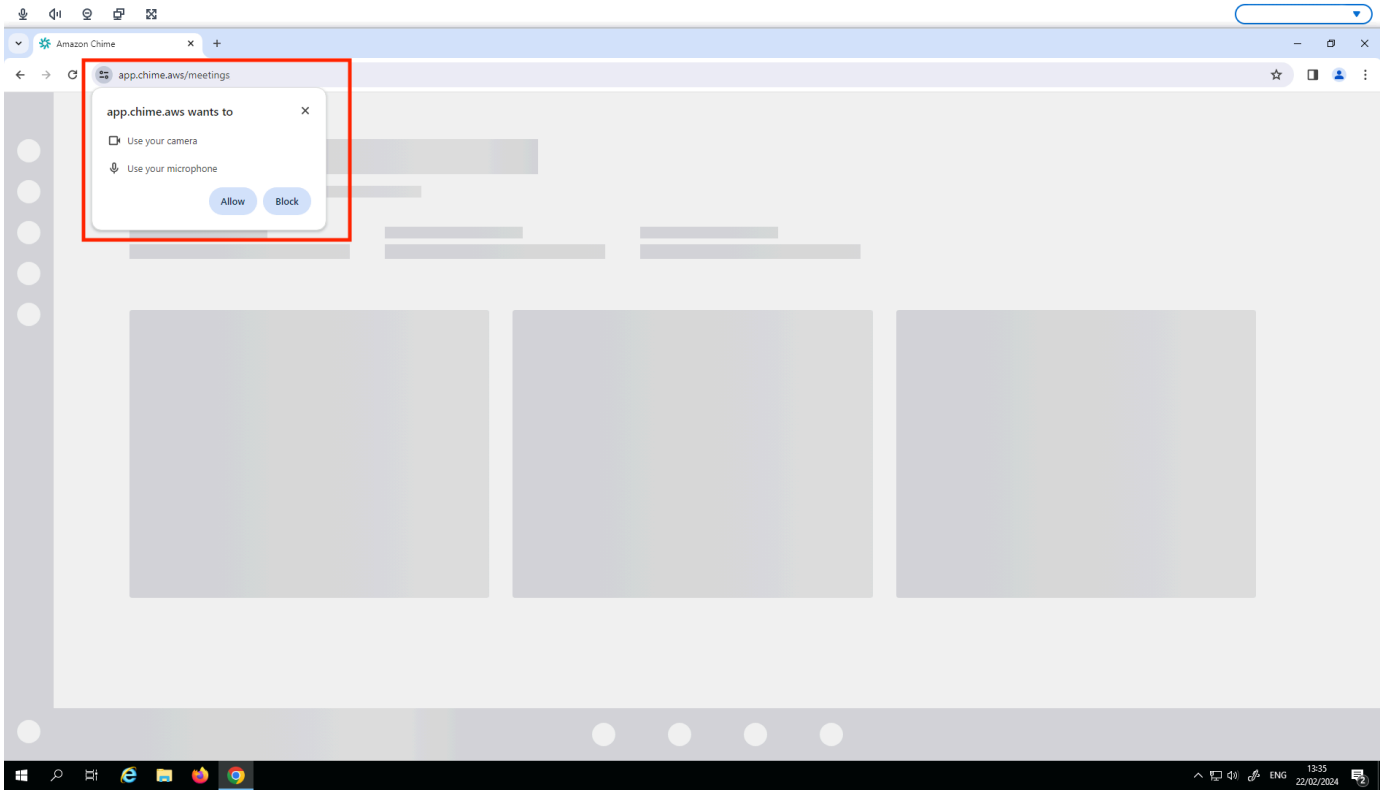
Confirm your webcam and microphone are properly connected to your WorkSpaces Thin Client.

1. Go to **Settings**.
2. Select **Peripheral Devices**.
3. Verify that your webcam and microphone are listed.

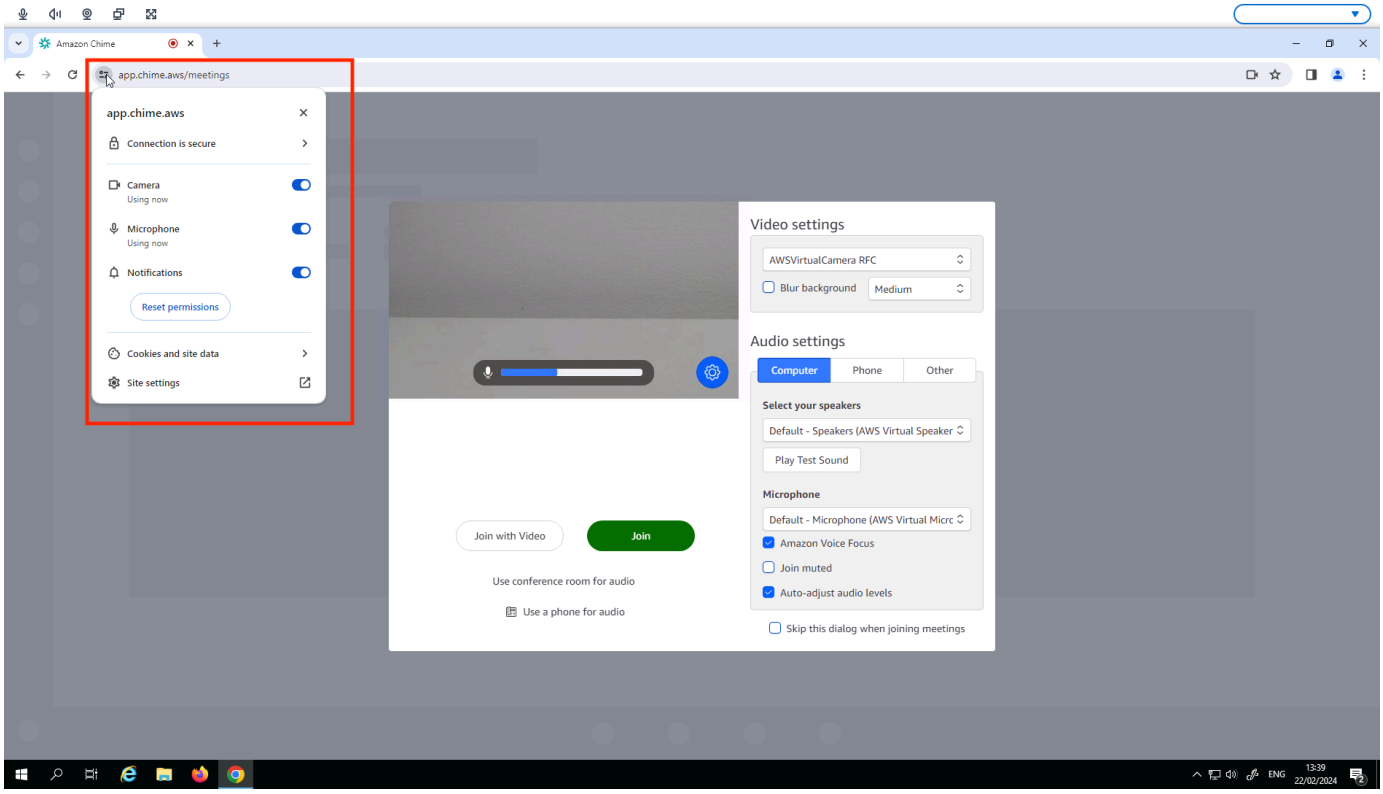
After you have confirmed that your peripheral is enabled in either AppStream 2.0 or Amazon WorkSpaces Secure Browser, you will need to enable them from your web browser. See Enabling permissions in the web browser.

Enabling permissions in the web browser

1. A pop-up window will appear asking for Microphone and Webcam permissions. If you do not see the pop-up, you can select the icon next to the address bar.



2. Select Allow in the pop up window.
3. Select the **Settings** icon on the browser search bar and make sure **Microphone** and **Webcam** are enabled.



> **Note**
>
> You may need to repeat the above step every time you want to use your webcam and microphone in a website.

Changing the Sound settings on the WorkSpaces Thin Client

WorkSpaces Thin Client has a couple of sound settings that you can configure including volume and microphone muting.

Setting the volume level from your virtual desktop

After you set up your peripheral, you can control your volume settings through the VDI toolbar or on the device. For more information, see Changing the Sound settings on the WorkSpaces Thin Client.

For more information on your VDI toolbar, refer to the following:

- For Amazon WorkSpaces Secure Borwser see WorkSpaces Secure Browser Access

- For AppStream 2.0 see Web Browser Access
- For Amazon WorkSpaces Web see Use the toolbar

After you set the volume it stays at that level, even if you restart your Amazon WorkSpaces Thin Client.

Changing the default volume of the WorkSpaces Thin Client

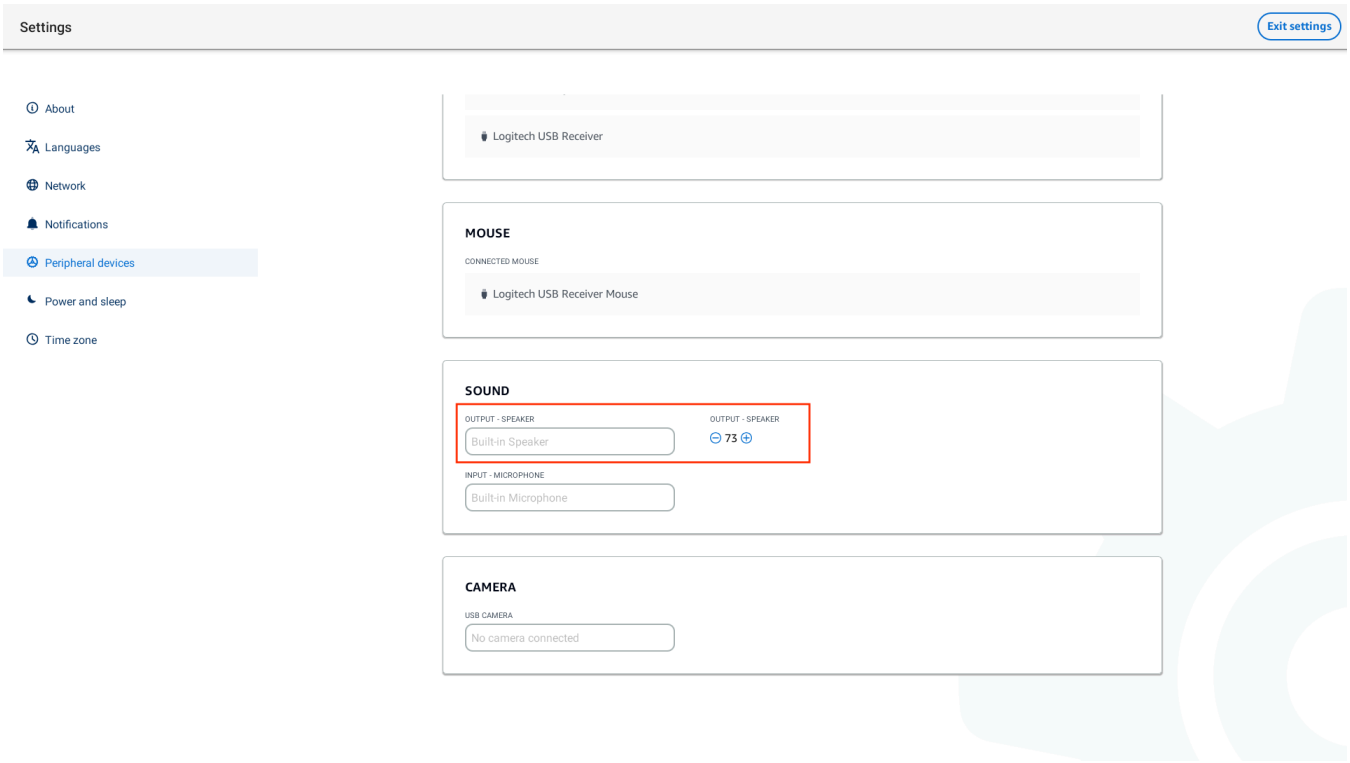
Your WorkSpaces Thin Client device has two default volume settings depending on the peripheral.

- Default volume for the WorkSpaces Thin Client device is 73.
- Default volume for a connected headset is 40.

You can change these defaults.

Changing the default volume (Output) of the device speaker

1. Disconnect any headset from the device.
2. Change the volume by doing one of the following:
    - Go to **Settings**, **Peripheral Devices**, **Sound**, and change the **Output-Speaker** by using the + and − icons.

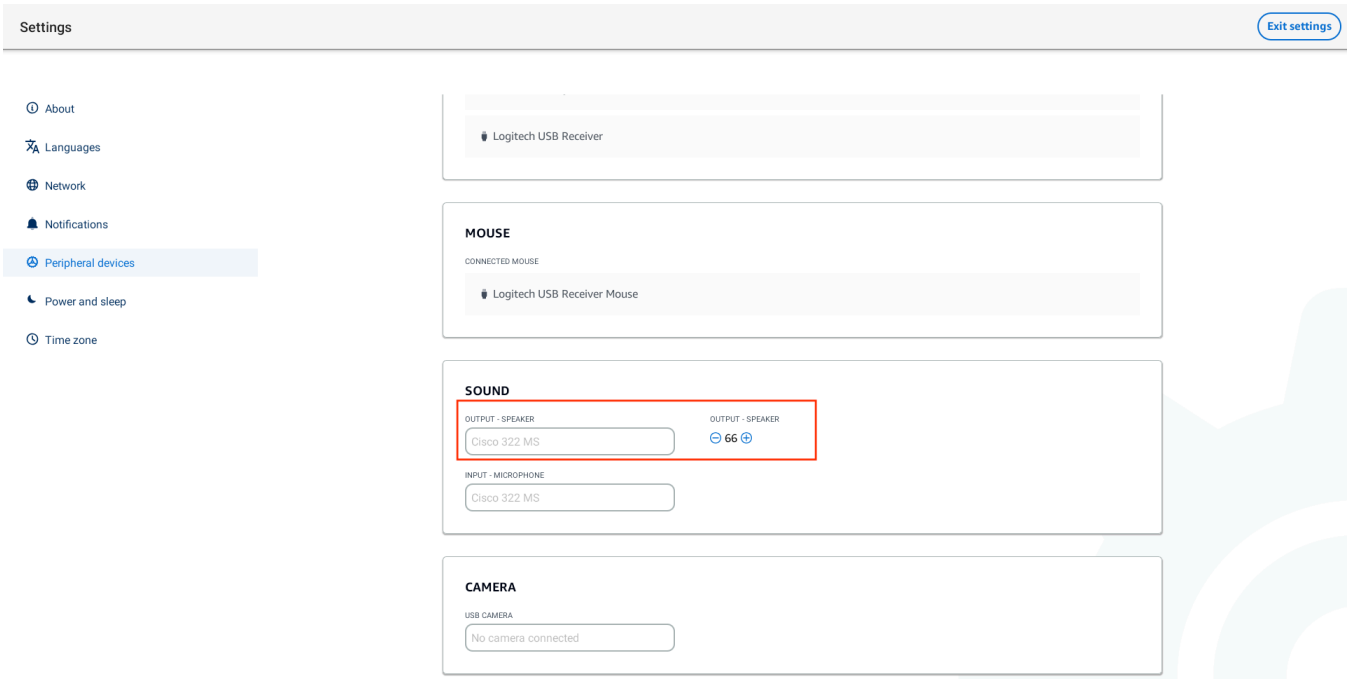


> **Note**
>
> Your built-in speaker volume stays the same even if you restart the device or change the volume of the headset.

- Press the + and − volume buttons on the top of the device to raise or lower the volume.

Changing the default volume (Output) of the headset

1. Connect a headset to the device.
2. Change the volume by doing the following:
   - Go to **Settings**, **Peripheral Devices**, **Sound**, and change the **Output-Speaker** by using the + and − icons.



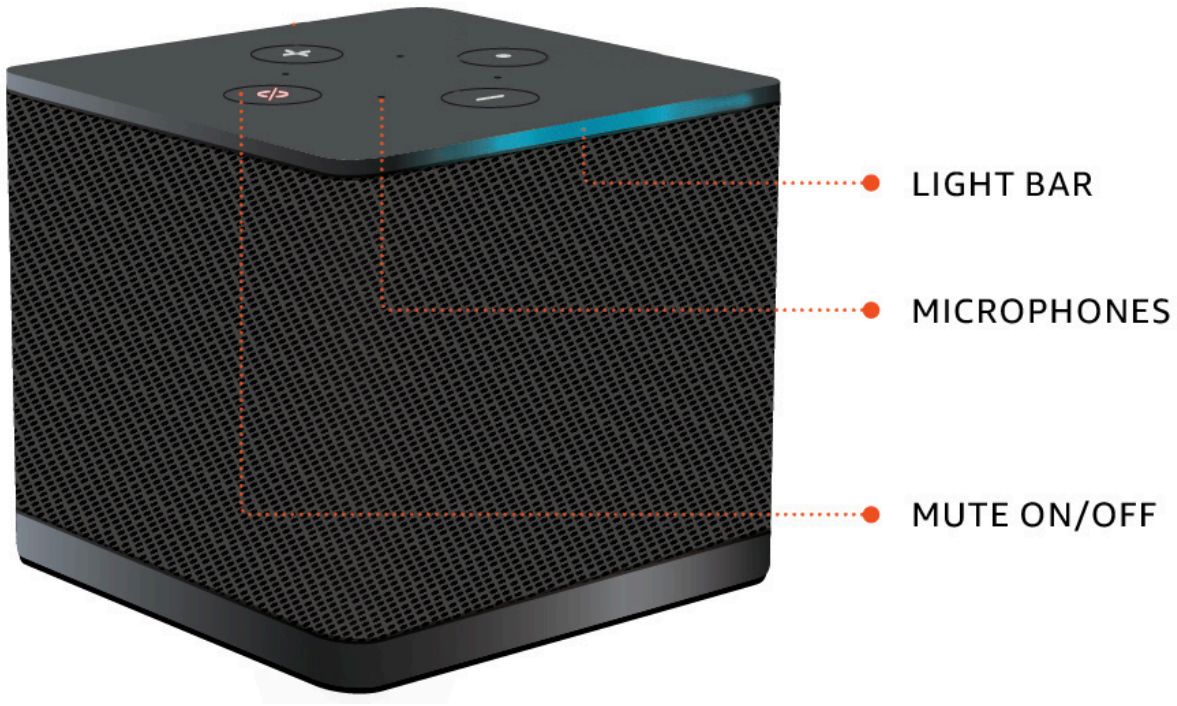
- Press the + and − volume buttons on the top of the device to raise or lower the volume.

- If your headset has volume buttons attached to it, you can use them.

Using Mute on WorkSpaces Thin Client

You can use the Mute function by doing one of the following:

- If you want to mute all connected and built-in microphones on your WorkSpaces Thin Client, use the **Mute** button on the top of the device. The icon on the button will glow red when Mute is activated.



- If you want to mute just the device microphone, connect a headset with microphone to the device. The device microphone is automatically muted.

Managing the display resolution

WorkSpaces Thin Client supports a maximum of two displays - the primary monitor and the extended monitor.

If you have a second monitor connected, your display automatically extends to the second monitor on the launch of a desktop session and the online remote desktop toolbar shows a **Multiscreen** button. You can use this button to switch from using a single screen to using two screens. For more information, see the **Web browser client** section of Extending full-screen across all monitors in the *Amazon DCV User Guide*.

Your device determines the best resolution to use with each of your displays when you start your device. The maximum supported resolution depends on the number of displays you have connected, as shown in the following table.

Displays	Maximum Resolution
1 (Primary monitor only)	• Regular 1080p monitor – 1920x1080 (aspect ratio of 16:9) • 2K monitor – 2560x1440 (aspect ratio of 16:9) • 2K ultra-wide (UWD) monitor – 3440x1440 (aspect ratio of 21:9) • 4K monitor – 3840x2160 (aspect ratio of 16:9)
2 (Extended monitor)	1920x1080

Note

While primary 4K monitors and 4K ultra-wide monitors are capable of the maximum resolution listed, some virtual desktop interfaces will have a lower resolution. See 4K monitor not at full resolution.

Connecting a 2K or 4K monitor

2K and 4K resolution is only available through the primary monitor HDMI port located on your WorkSpaces Thin Client device.

WorkSpaces Thin Client automatically recognizes ultra-high definition (2K or 4k) monitors when they are connected to the primary monitor HDMI port. For a list of supported 2K and 4K monitors, see Supported peripherals.

> **Note**
>
> You cannot use an extended monitor if you configure your primary monitor for 2K, 2K ultra wide, or 4K resolution.

Using 4K resolution on WorkSpaces Thin Client

1. Connect a 2K or 4k monitor to the HDMI OUT port located on the WorkSpaces Thin Client device.
2. Turn on the device.

The device should recognize the high density display and set the resolution automatically.

Changing the display resolution

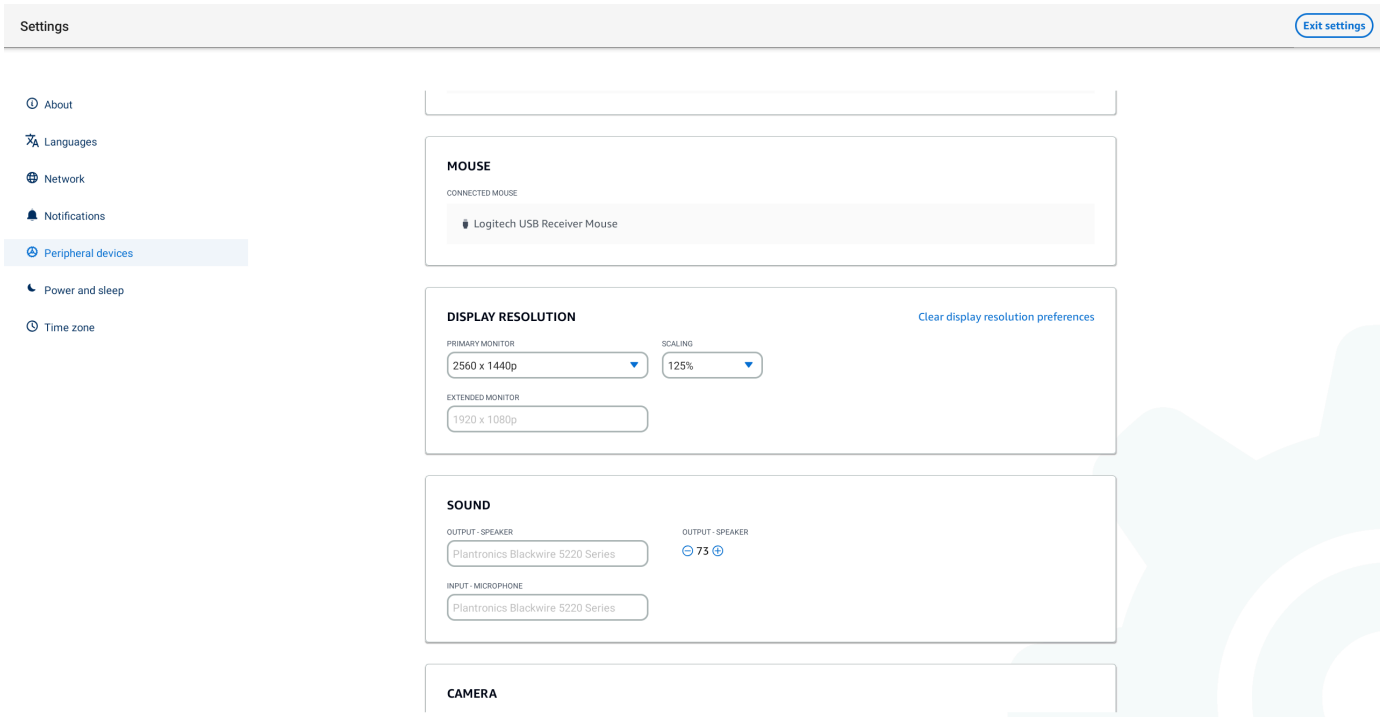
You can change the resolution of your WorkSpaces Thin Client device display. If needed, you can lower your resolution setting on your 4K monitor.

If you lower your 2K or 4K display to a standard resolution, WorkSpaces Thin Client will remember this preference and start up in 1080p mode for that display. If this setting is not changed, 4K displays will continue to use 4K resolution automatically. This preference can be removed by resetting the resolution. For more information, see Resetting the display resolution.

> **Note**
>
> The WorkSpaces Thin Client device must be shut down before connecting a new display or switching between displays. Once the new display is connected, power up the device and set your resolution.

Changing the display resolution

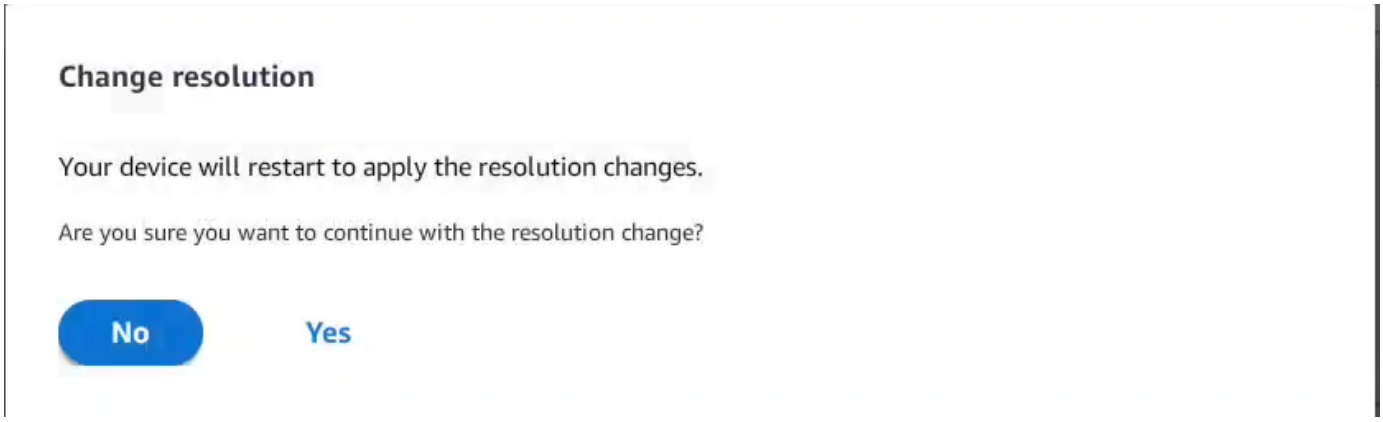
1. Select **Settings** from the toolbar on the primary monitor.
2. Select **Peripheral Devices**.
3. Go to **Display Resolution**.
4. Select **Primary Monitor** to open the drop down menu.



5. Select one of the following:

   - 3840x2160 – 4K resolution when using a single monitor that supports ultra-high definition.
   - 1920x1080 – Standard resolution when using any two monitors.

6. Select **Scaling** and select the desired setting from the drop down list.
7. Restart your device by selecting **Yes** in the pop-up window.



Resetting the display resolution

You can choose to reset the display preferences of your WorkSpaces Thin Client device. This deletes any preferences set for all connected displays. The device resets the setting back to the highest supported resolution for that display.

Resetting the display resolution

1. Select **Settings** from the toolbar on the primary monitor.
2. Select **Peripheral Devices**.
3. Go to **Display Resolution**.
4. Select **Clear display resolution preferences**.
5. Select **Restart** in the pop up window.

Performing a screen capture

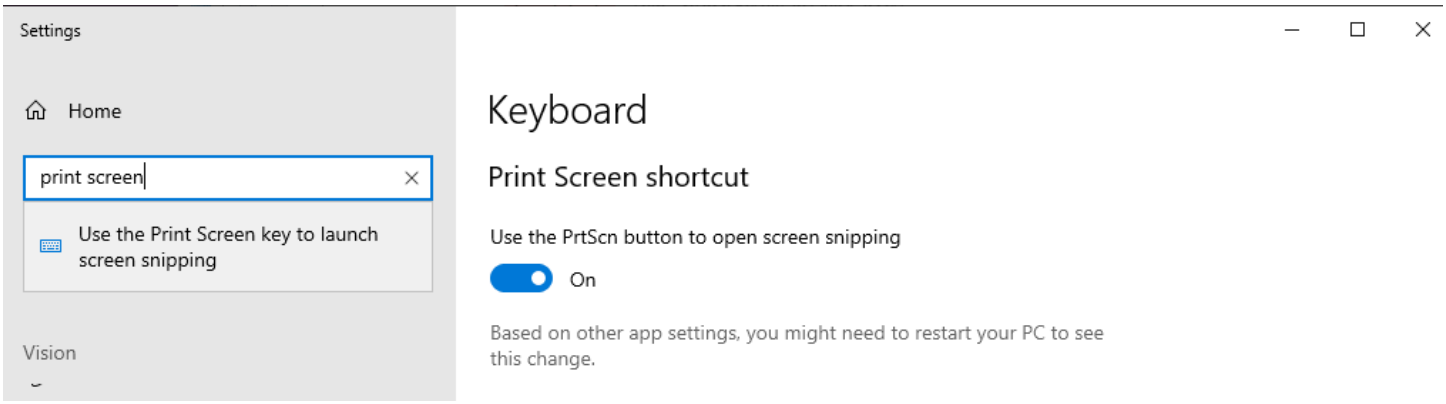
The WorkSpaces Thin Client is able to perform a screen capture or save an image of the contents of your display.

Using the PrintScreen button

If you are using Windows 10 or Windows 11, you can use the **PRINT SCREEN** button located in the upper right of your keyboard. Depending on your keyboard, the button may be labeled **PrintScreen** or **PrtScn**.

You can do a screen capture on a selected active window in your display or the entire display.

To use the Print Screen key, you need to enable the **Print Screen** keyboard shortcut in your Windows settings.



Capturing an image on the display

1. Press **PRINT SCREEN**.
2. Press **CRTL+V** to paste the image into another application.

Rebooting the WorkSpaces Thin Client device

When you must reboot or restart your WorkSpaces Thin Client, you can do this in two ways.

Rebooting by using the toolbar

1. Select the circular arrow icon or select **Restart device** in the toolbar.

2. Select **Yes** in the **Restart Device** window.

Rebooting manually

1. Unplug the power cable on the back of your WorkSpaces Thin Client.
2. Wait ten seconds and plug the power cable back into your WorkSpaces Thin Client.

Setting the Sleep mode

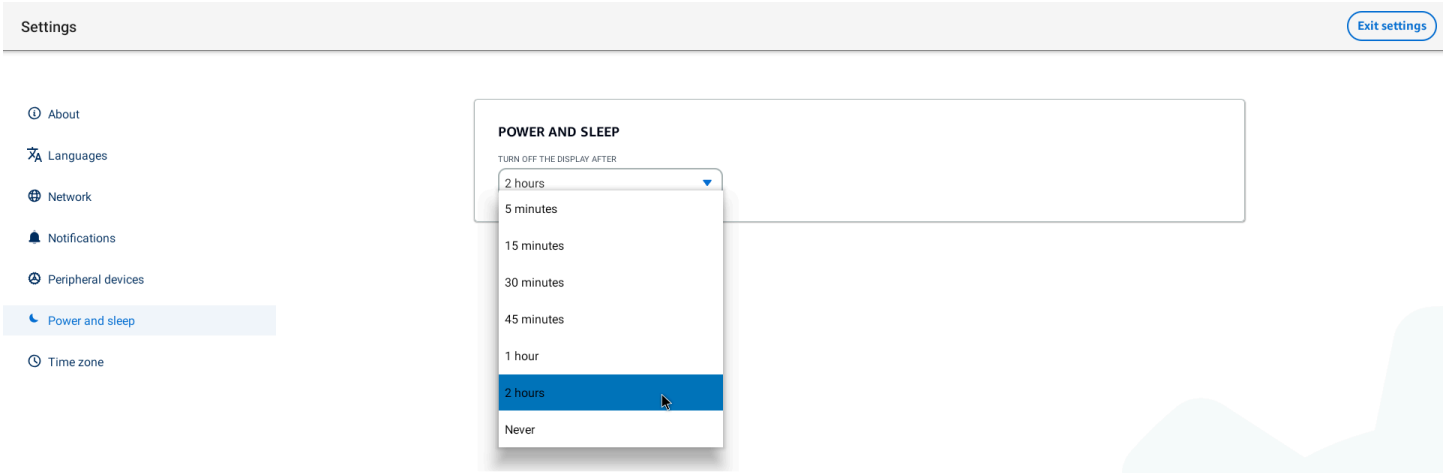
Amazon WorkSpaces Thin Client has a Sleep mode that turns off its display if it remains inactive for a specified period of time. This reduces energy consumption when idle.

The default period of time for Sleep mode is 15 minutes of inactivity. Any movement of the mouse or pressing of any key on the keyboard will reset the Sleep mode.

You can change the Sleep mode setting by doing the following:

1. Go to **Settings**.
2. Select **Power and Sleep**.
3. Select a value from the drop-down menu. You can change it to one of the following:

   - 5 minutes
   - 15 minutes
   - 30 minutes
   - 45 minutes
   - 1 hour
   - 2 hours
   - Never



Managing networks

Your WorkSpaces Thin Client device needs to be connected to a Wi-Fi network in order to access your virtual desktop. You can manage your Wi-Fi networks from your WorkSpaces Thin Client

device. Once you connect to a network, your device will automatically sign in to that network when you turn it on.

Notifications about your network are available should you want them. For more information on network notifications, see the section called “Enabling network alerts”.

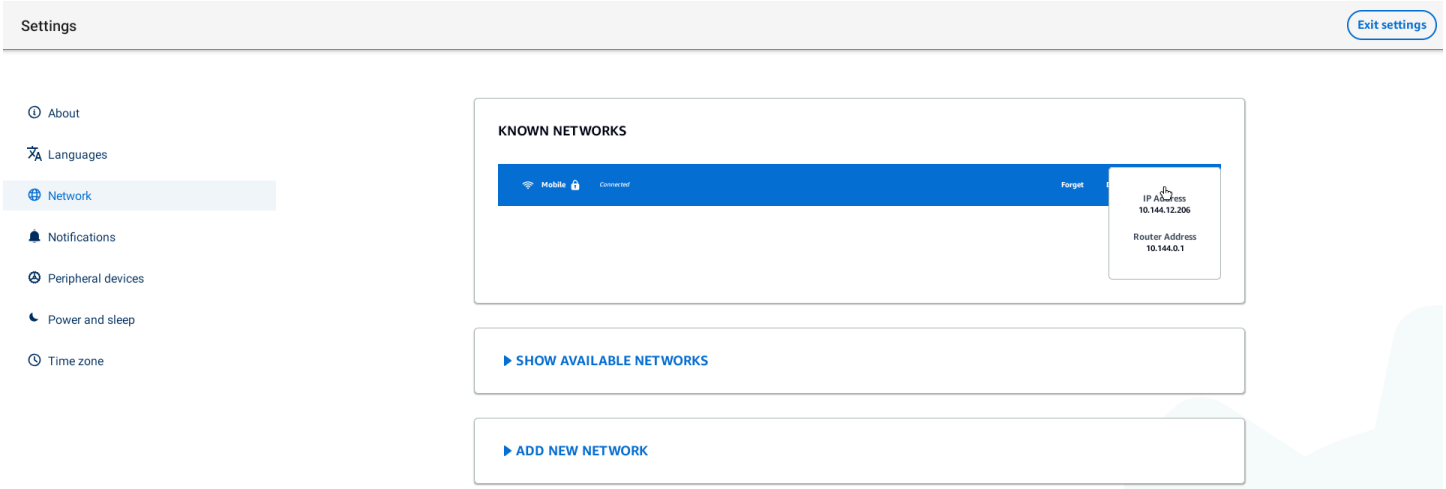
Topics

Viewing network details

Each network will have addresses associated with it.

1. Go to **Settings**, **Network**, **Known Networks**.
2. Select the horizontal ellipsis icon (**...**).

A list with the address information will appear as shown in the image below.



Disconnecting a network

You can disconnect from a network that is currently in use.

1. Go to **Settings**, **Network**, **Known Networks**.
2. Select **Disconnect** from the network you are using.

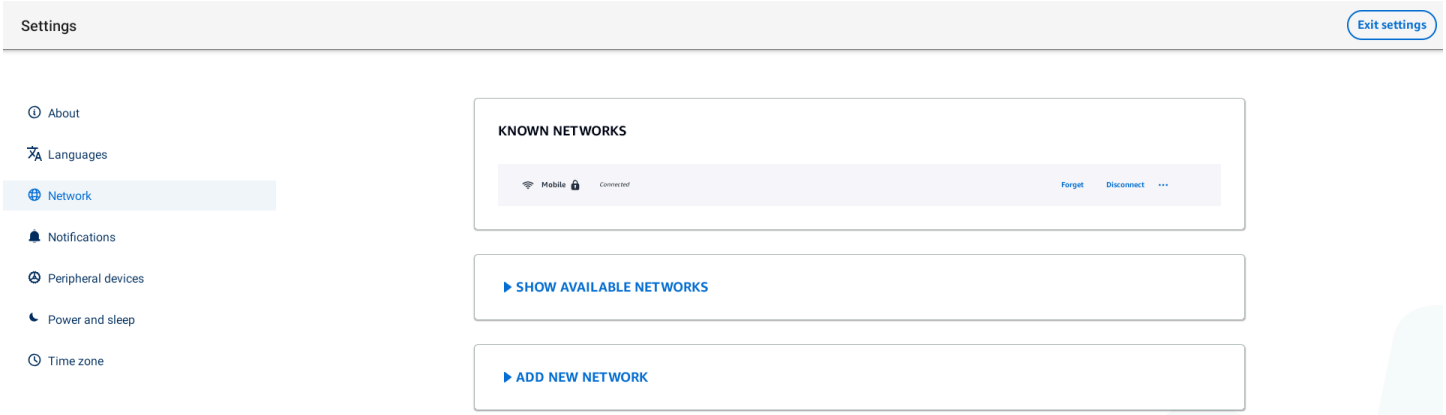
Your WorkSpaces Thin Client device will then sign on to the next available network listed. To reconnect, double-click the network form the **Known Networks** list.

Forgetting a network

Your WorkSpaces Thin Client will automatically sign on to your set Wi-Fi network. If you're currently using or you have joined a network that you no longer use, your device can forget this network.

Your device can only forget known Wi-Fi networks. If your device has never joined a Wi-Fi network, you don't have the option to forget that network.

Your device can not forget Ethernet connected networks.

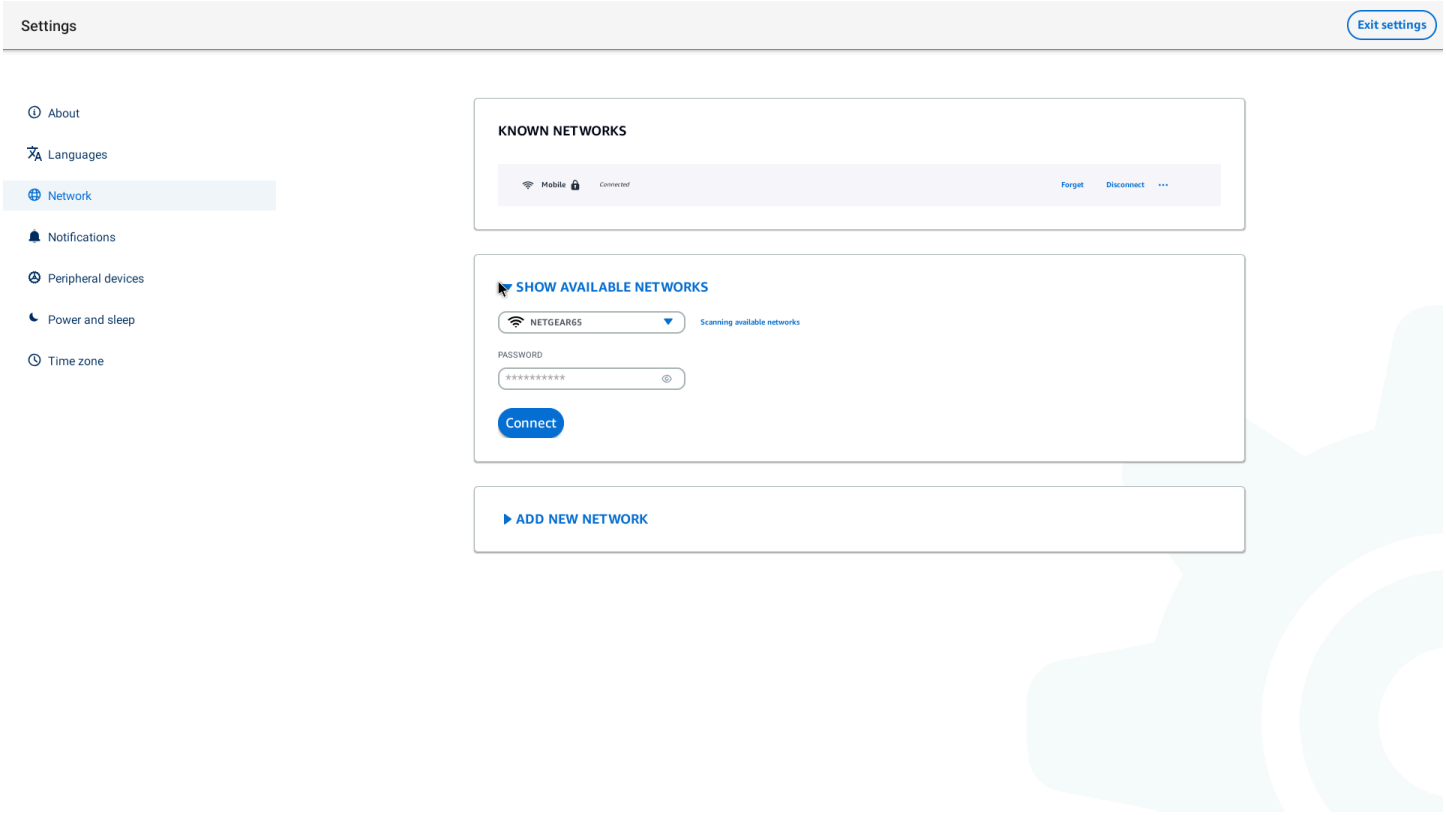


1. Go to **Settings**, **Network**, **Known Networks**.
2. Select **Forget** from the desired network.

The network is removed from the **Known Networks** list. If you want to join this network again, please use Show Available Networks or Add New Network to connect to the network again.

Showing available networks

Your WorkSpaces Thin Client device scans the area for any Wi-Fi networks in the area. You can sign on to any available networks once the device lists them.



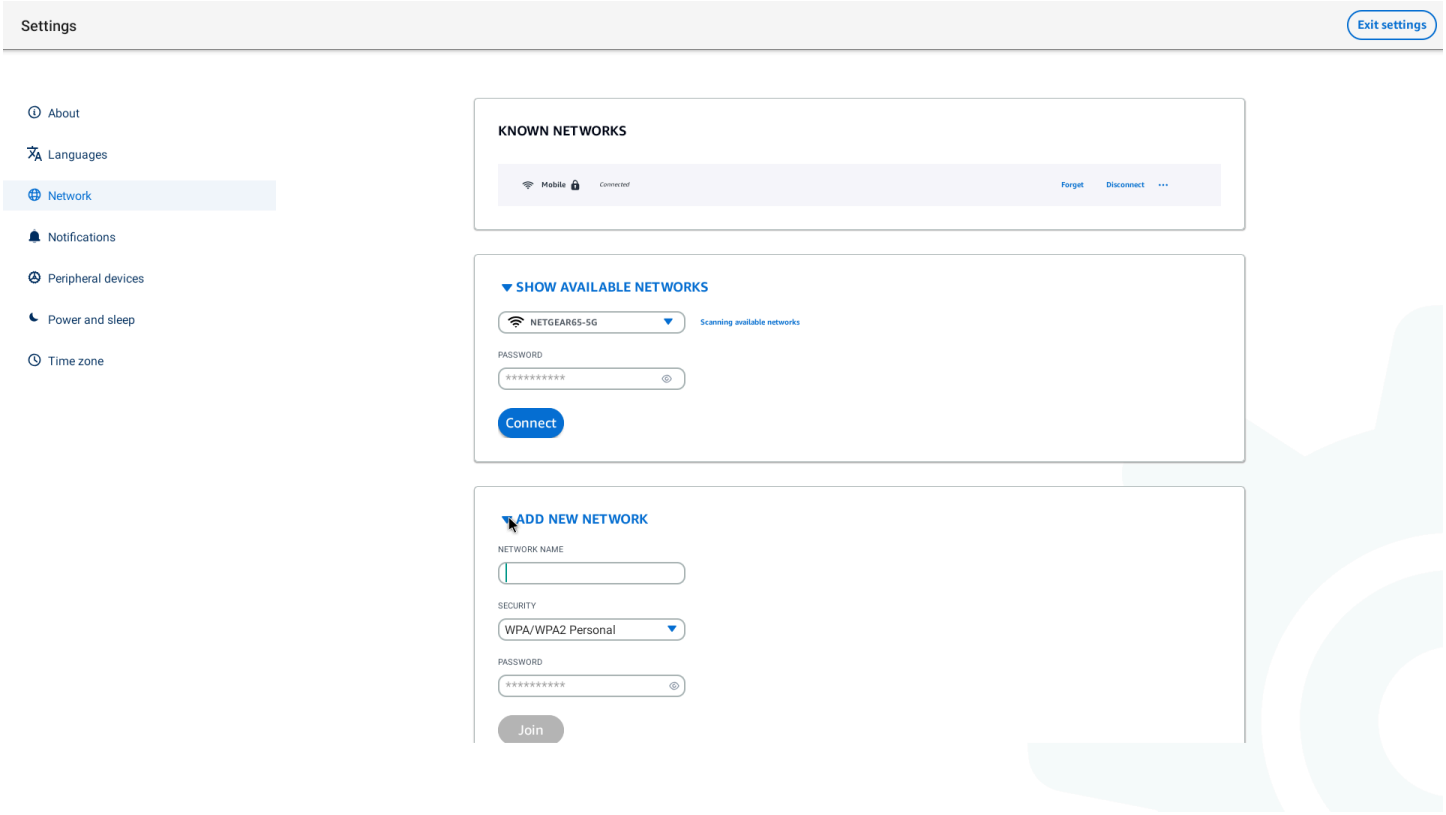
1. Go to **Settings**, **Network**, **Show Available Networks**.

   Once you select it, the WorkSpaces Thin Client device will scan the area for available networks.
2. After the scan is done, select a network from the list of available networks.
3. Enter the password for the network in the **Password** field.
4. Select **Connect**.

Your device will connect to the selected network and add it to the **Known Networks** list.

Adding a new network

If you have a specific Wi-Fi network that you would like to use, you can connect it to your WorkSpaces Thin Client device.

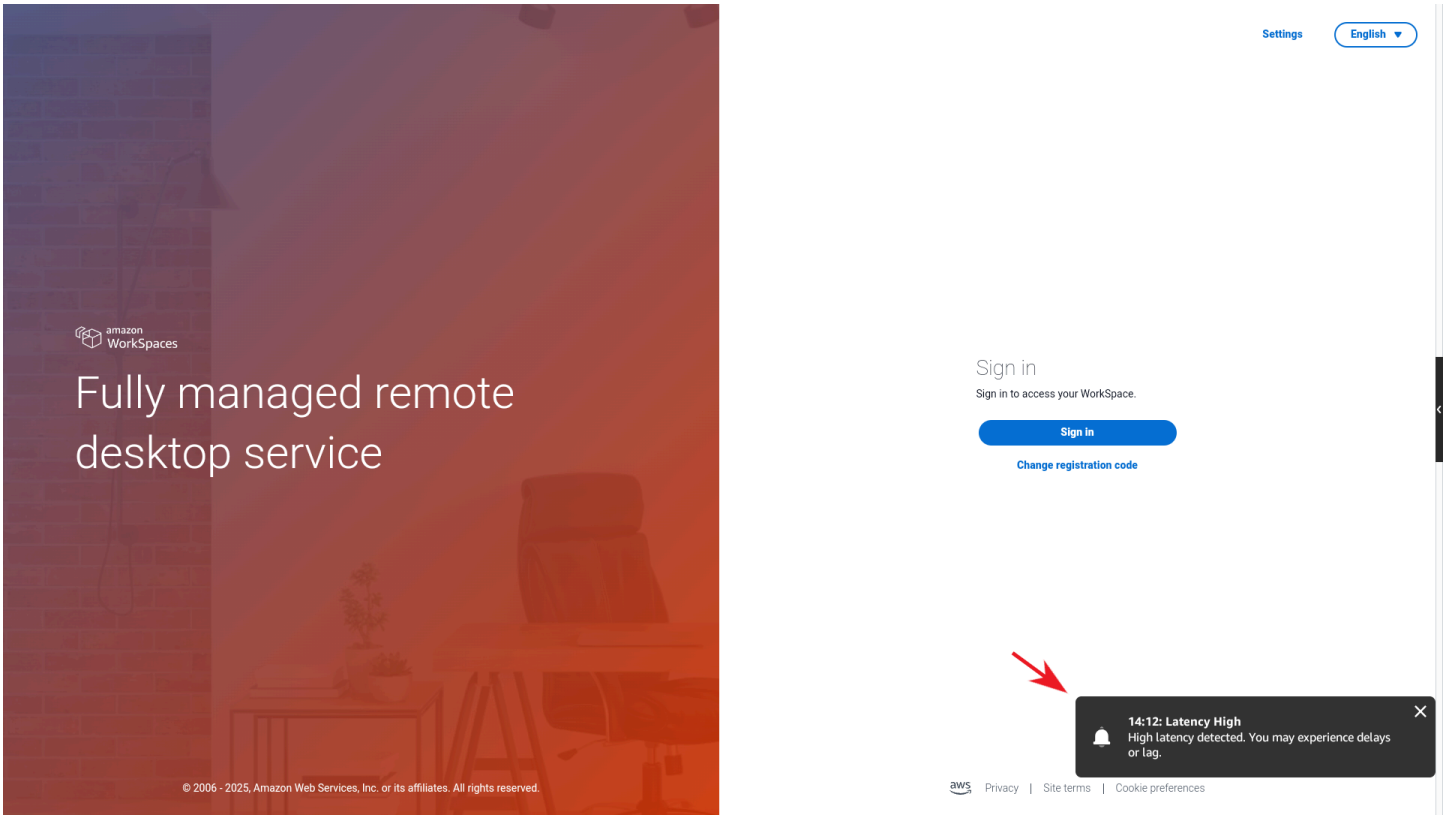


1. Go to **Settings**, **Network**, **Add New Network**.
2. Enter the name of your network in the **Network Name** field.
3. Select the security protocol from the list in **Security**.
4. Enter the password for your network in the **Password** field.
5. Select **Join**.

Your device will connect to the selected network and add it to the **Known Networks** list.

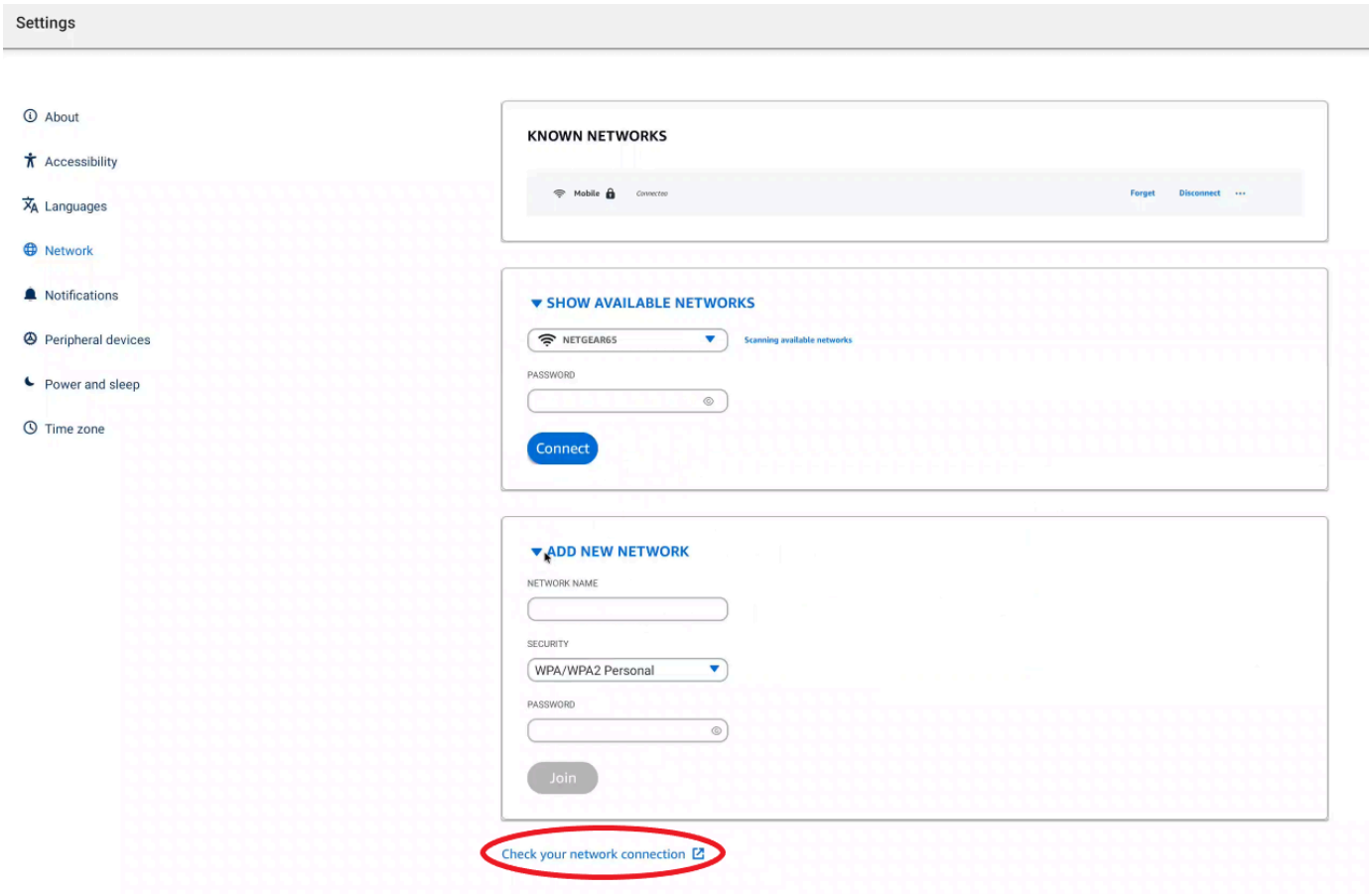
Detecting network latency

If your WorkSpaces Thin Client device is lagging in either performance or display, it may be experiencing network latency. Network latency is measured in milliseconds (ms). If a WorkSpaces Thin Client device has a network latency over 150 ms, a notification will appear.



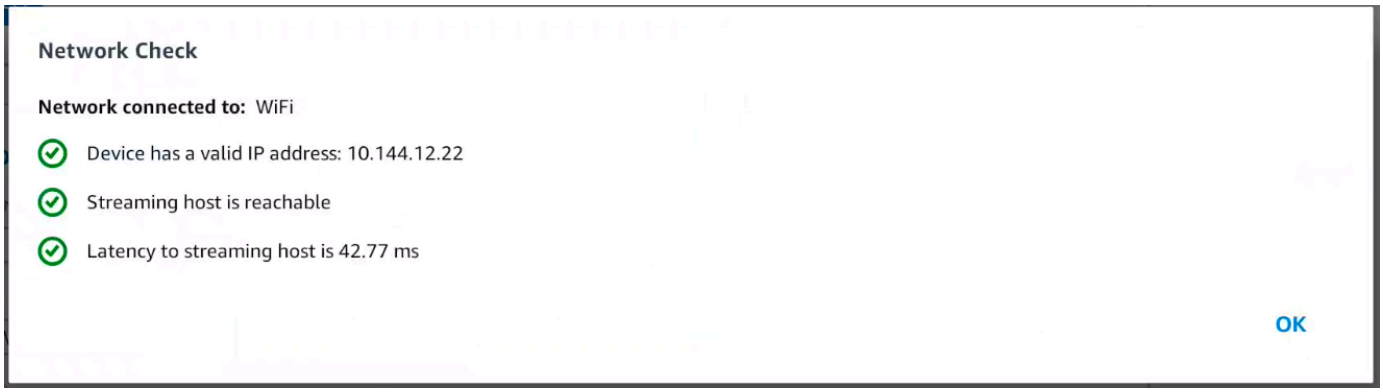
When this occurs, you can check your network connection for any possible issues.

1. Go to **Settings**, **Network**.
2. Select **Check your network connection**.



3. Verify the following have green checks:

   - Device has a valid IP address
   - Streaming host is reachable
   - Latency to streaming host is under 150 milliseconds (ms).



If an issue appears within that checklist, contact your administrator.

Deferring software updates

Your WorkSpaces Thin Client device requires periodic updates. These updates are managed by your IT administrator. When an update is ready, the administrator will release it to your device. If you need to, you can defer, or postpone, these updates. When you receive the update, your screen will show a pop-up notification, like the image below.

You have three options.

- Install now

  If you choose **Install now**, your device will install the update immediately. This disconnects you from your current session and you will need to log in again after the update. We recommend that you restart your device after an update.

- Install in one hour

  If you choose **Install in one hour**, the update will be deferred for one hour. After that, you will receive the pop-up notification again.

  If you restart your device before then, the updates will install at that time. You will not see the pop-up notification again.

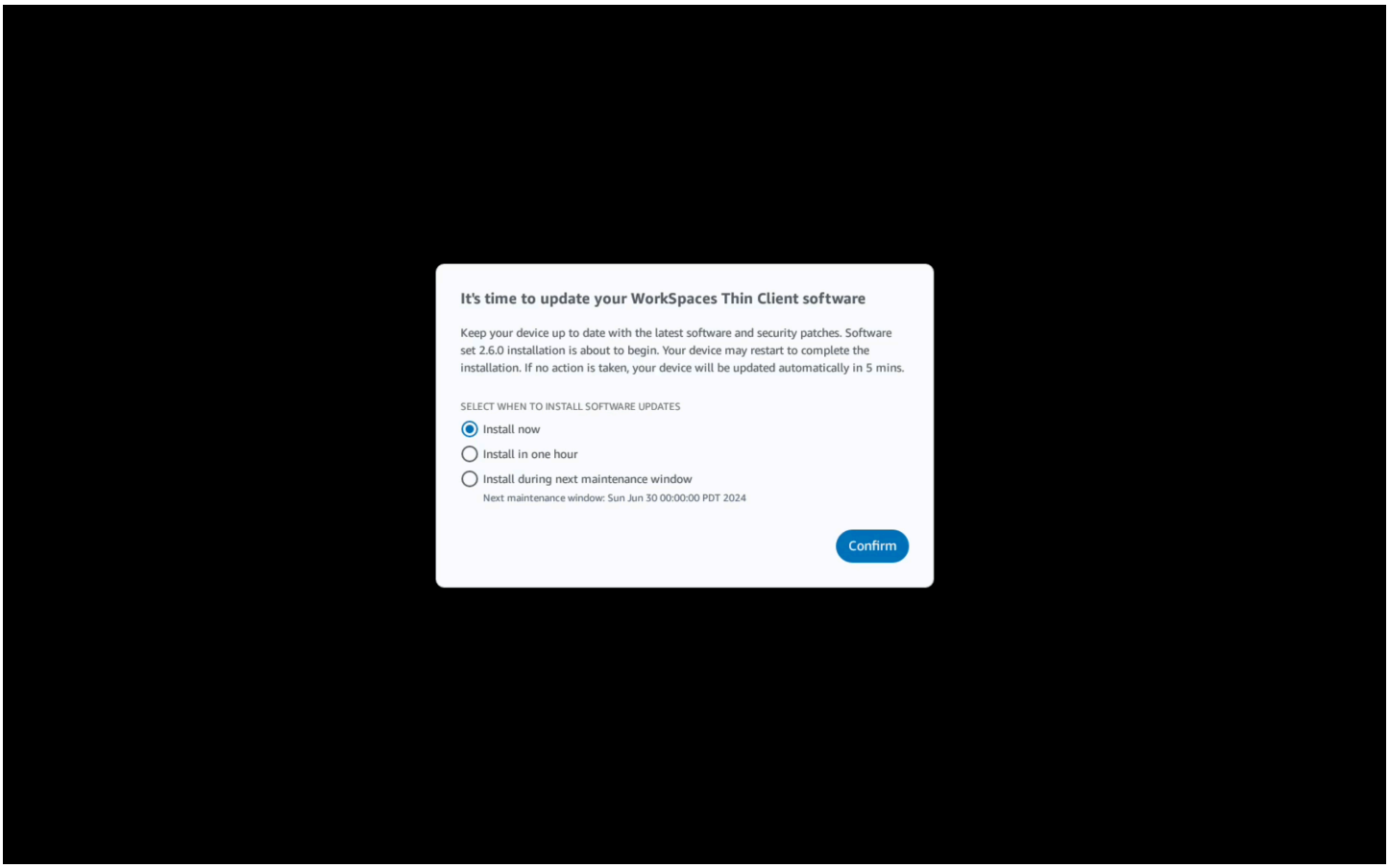
- Install during your maintenance window

  If you choose **Install during next maintenance window**, the update will be deferred until the next scheduled maintenance window. Maintenance window times are managed by your administrator. For more information, please contact your IT administrator.

  For example, your IT administrator sets up a maintenance window time of 10:00 pm on Sunday night of each week. You defer your update to install during the maintenance window. So, on 10:00 pm that next Sunday night, your device will receive the pop-up notification again. Or, if your administrator sets up maintenance windows on Monday, Wednesday, and Friday of each week. You defer the update on Monday. On Wednesday, your device will receive the pop-up notification again. In either case, if you do not defer again, the update will install after five minutes.

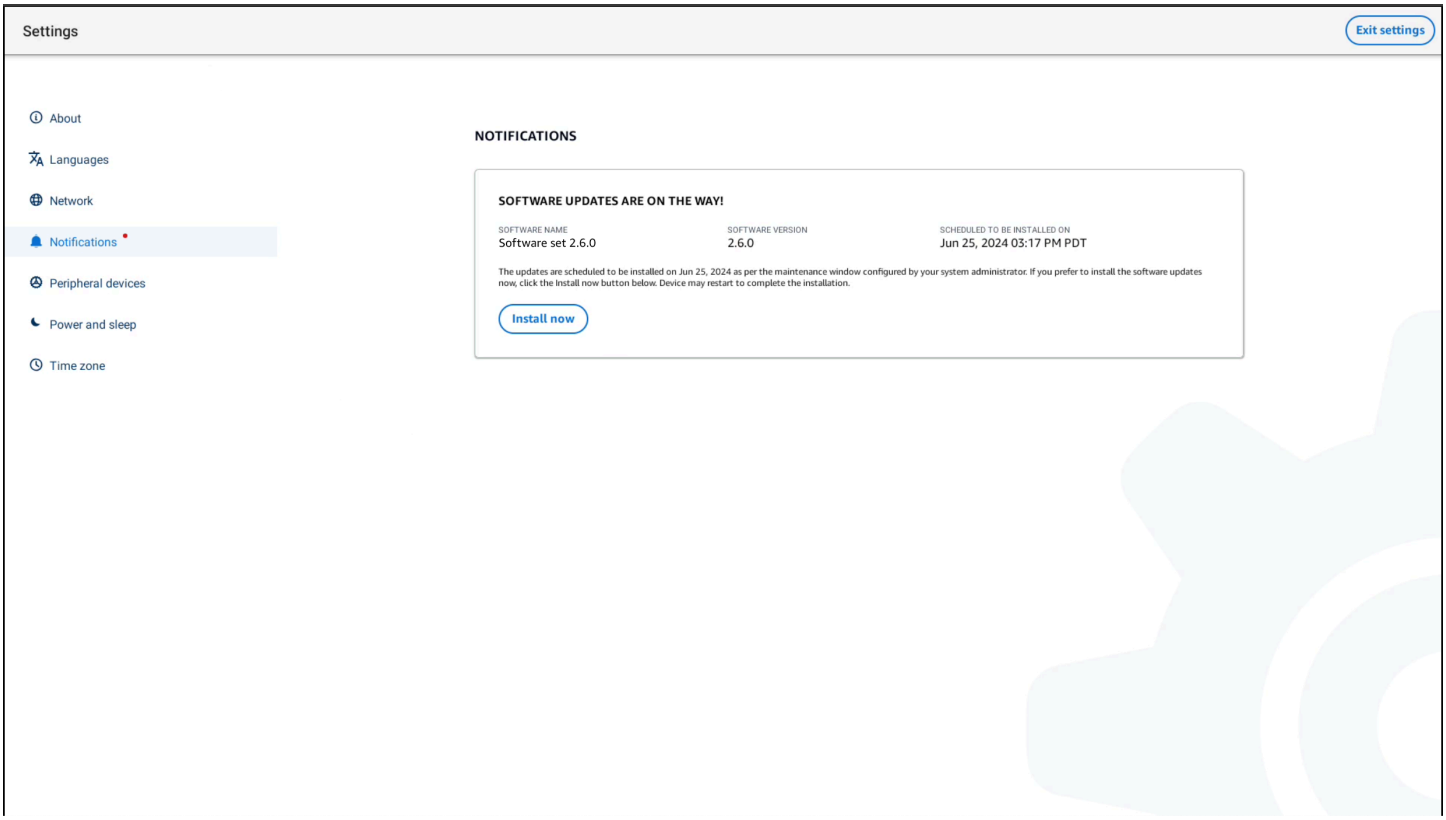
  If you restart your device before then, the updates will install at that time. You will not see the pop-up notification again.

> **Note**
>
> If you do not make any selection within five minutes, your device will automatically begin to install the update.



If you selected **Install in one hour** or **Install during next maintenance window**, a notification related to the update will appear in the **Notifications** section of **Settings**. For an example of this, refer to the image below.

The notification will tell you the name of the updated software, the version number, and when you will receive the pop-up notification again. If you want to install the update immediately, select **Install now**.



You can continue deferring updates. After a certain point, however, your device will be considered behind schedule. If this happens, the updates will install automatically.

System and network alerts

WorkSpaces Thin Client uses alerts to inform you of system and network issues that may affect your device. Some of these notifications contain a button to restart the device when it is updated or modified.

These notifications are, by default, disabled. If desired, they can be enabled.

> **Note**
>
> This feature should only be enabled for troubleshooting issues. It is not intended for daily use.

Enabling system alerts

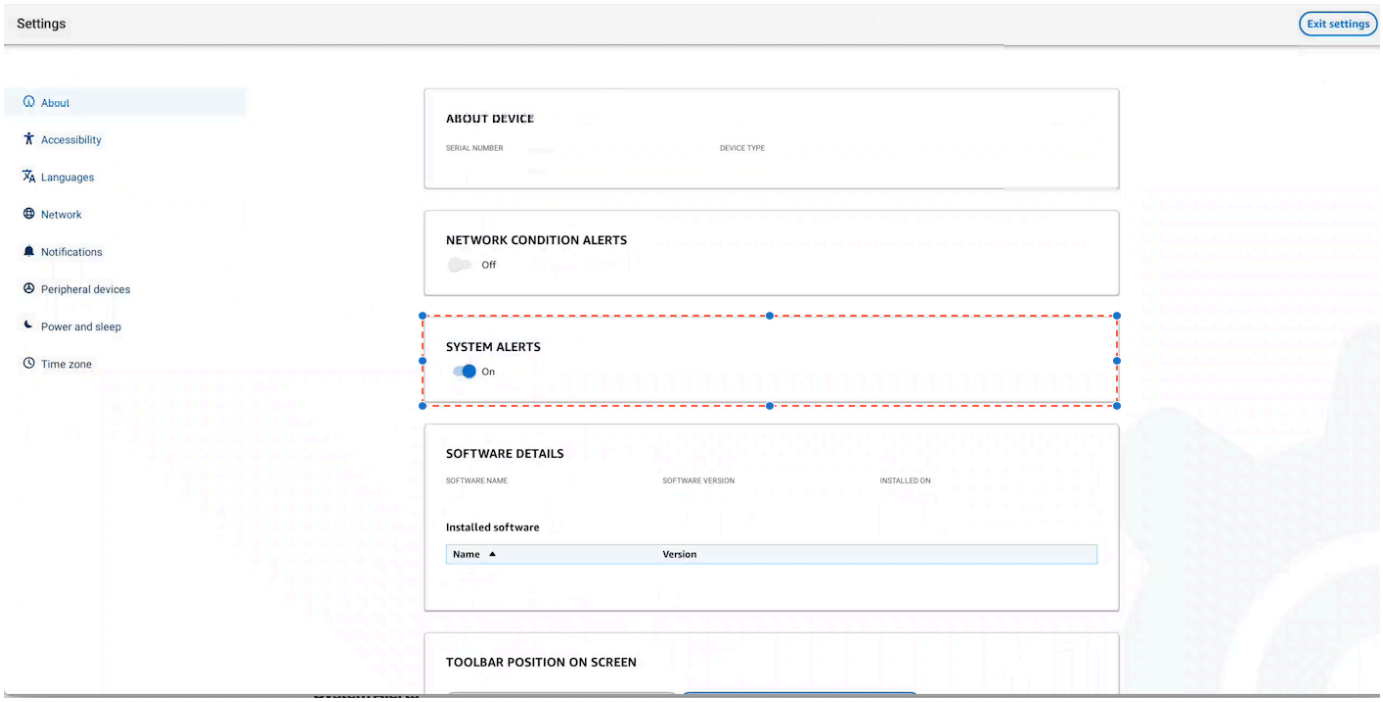
As part of the operating system of your WorkSpaces Thin Client device, you will receive notifications regarding your system. These notifications alert you if you experience any change to you device or connected peripheral. Some of them include:

- Monitor added
- Monitor removed

If needed, you can turn on these notifications. By default, notifications are set to **Off**.

Turning network notifications on and off

1. Open the toolbar on the side of your display.
2. Select **Settings**, **About**, **SYSTEMS ALERT**.
3. Select the switch to **On** to enable the notifications.



Enabling network alerts

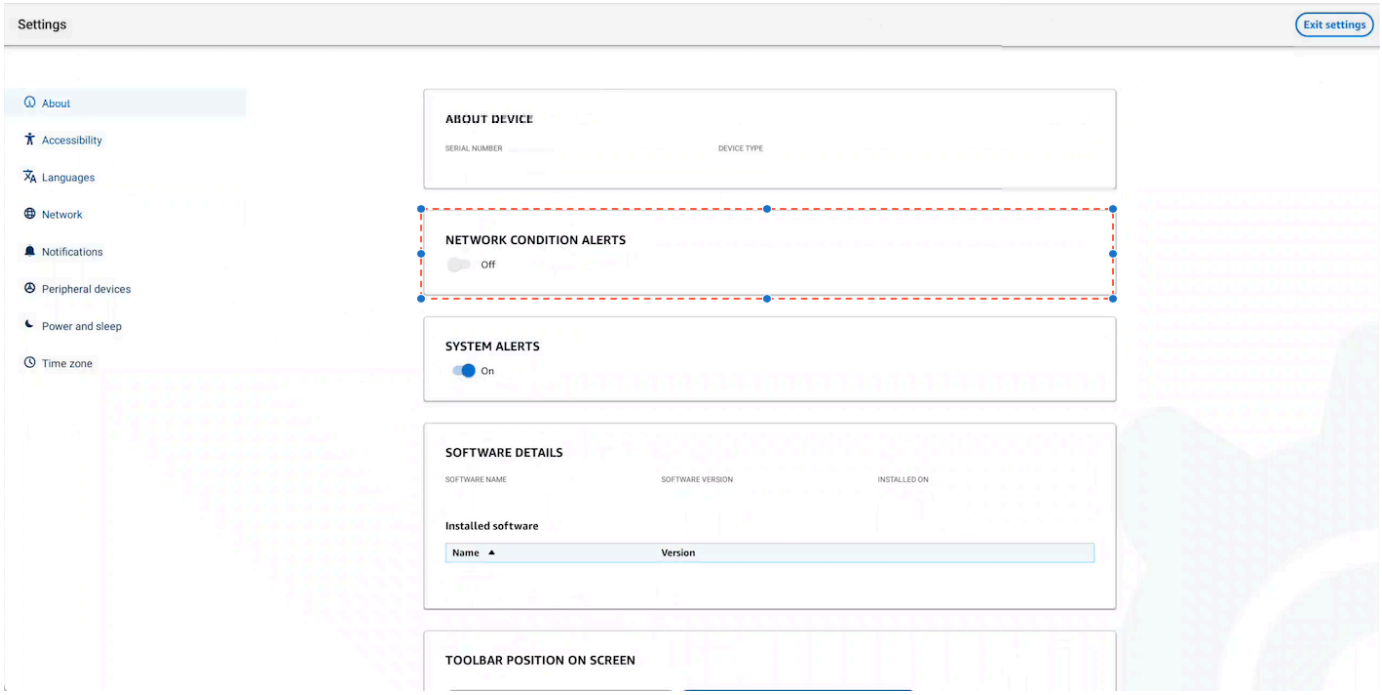
As part of the operating system of your WorkSpaces Thin Client device, you will receive notifications regarding your network. These notifications alert you if you experience any degraded network conditions. Some of them include:

- Ethernet or WiFi Network disruptions
- Wifi signal strength
- Packet loss or data lost in transmission

If needed, you can turn on these notifications. By default, notifications are set to **Off**.

Turning network notifications on and off

1. Open the toolbar on the side of your display.
2. Select **Settings**, **About**, **NETWORK CONDITIONS ALERT**.
3. Select the switch to **On** to enable the notifications.



How we use your data

To help us improve our products and services, we may ask you to provide feedback about your experience using WorkSpaces Thin Client. Providing feedback is not required but is appreciated.

We use this feedback solely for internal purposes only. Along with your feedback, we may collect your device serial number. This information is handled in accordance with the AWS Privacy Notice.

Using WorkSpaces Thin Client accessibility features

Amazon WorkSpaces Thin Client provides accessibility features designed to help you use your device. With VoiceView, you can navigate your WorkSpaces Thin Client using text-to-speech functionality, while Screen Magnifier allows for custom zoom levels to enlarge on-screen content. These features seamlessly integrate with the WorkSpaces Thin Client.

Topics

Using VoiceView

VoiceView is a built-in screen reader that speaks on-screen text out loud as you go through menu options and settings. You can use it to set up your device and navigate the controls.

VoiceView is available in English, French, German, Spanish, and Italian, and supports these keyboard layouts.

Setting up WorkSpaces Thin Client VoiceView

To set up VoiceView on your WorkSpaces Thin Client, use the following procedure:

1. Connect your WorkSpaces Thin Client device. See Connect your WorkSpaces Thin Client device.
2. Hold Ctrl+Alt+Shift+V for 2 seconds.
3. Hold for about 5 seconds until you hear "VoiceView ready."

VoiceView is now ready for you to use.

Enabling VoiceView on WorkSpaces Thin Client

To enable VoiceView to be used on WorkSpaces Thin Client use the following method:

Enabling VoiceView

1. Go to **Settings** on your WorkSpaces Thin Client.

2. Select **Accessibility**.
3. Select **VoiceView**.
4. Select **VoiceView** again to turn it on.

   Your WorkSpaces Thin Client device says "VoiceView ready" when the feature is enabled. When you turn the feature off, it will say "VoiceView exiting".

Controlling VoiceView

VoiceView controls and navigation

You can use your keyboard to control VoiceView. The following tables guide you through some of the functions you can perform and how to navigate using VoiceView.

VoiceView Controls

Keys	Action
Hold Ctrl+Alt+Shift+V	Turn VoiceView on or off
Press F2	Stop speech
Hold F2 and press Left or Right arrow key	Cycle through Speech Rate or Speech Volume settings
Hold F2 and press Up or Down arrow key	Increase/decrease speech volume or speed

VoiceView Navigation

Keys	Action
Tab	Move forward
Shift+tab	Move backward
Enter	Confirm selection
Up	Move up within a group

Keys	Action
Down	Move down within a group
Left	Move left within a group
Right	Move right within a group

VoiceView settings

To view and manage VoiceView preferences:

1. Go to **Settings** on your WorkSpaces Thin Client.
2. Select **Accessibility**.
3. Select **VoiceView**.

From here you can manage the parameters of VoiceView. The following table shows the parameters you can set.

Parameter	Action
VoiceView	Turn VoiceView on or off.
Reading Speed	Adjust the rate of speech speed for the VoiceView voice.
Speech Volume	Set a volume level for the VoiceView voice. Speech Volume defaults to 40% of device volume.
Sounds Volume	Set the volume level for the feedback sounds that VoiceView uses. Sounds Volume defaults to 40% of device volume.
Key Echo	Determine how text characters are echoed back to you while you enter them with the on-screen keyboard. By default, characters are echoed as they are typed to confirm entry. You

Parameter	Action
	can change this setting to **None**, **Characters**, **Words**, or both **Characters and Words**.
Punctuation Level	Control which punctuation marks VoiceView reads aloud.

Enabling Windows Narrator

If you are using a Windows virtual desktop session, please use Windows Narrator or your screenreader of choice to read content within your virtual desktop session.

- Press and hold the Windows logo#key+CTRL+Enter to turn Narrator on or off.

Using Screen Magnifier

Screen Magnifier enlarges the display on the screen up to 10 times. This feature is compatible with keyboard only.

Enabling the Screen Magnifier

You can enable the Screen Magnifier using one these methods:

Using the keyboard shortcut (Sessions other than Windows)

- Press and hold CTRL+ALT+SHIFT+M.

Using Accessibility settings

1. Go to **Settings**.
2. Select **Accessibility**.
3. Select **Screen Magnifier** toggle ON.

Once Screen Magnifier is turned on, a tutorial will appear with tips and details on keyboard combinations to use this feature.

Controlling the Screen Magnifier

You use your keyboard to navigate with the magnifier. The following table shows the keys used to control navigation.

Keys	Action
Hold Ctrl+Alt+SHIFT+M	Enables and disables Screen Magnifier
Hold Ctrl+Alt+SHIFT+?	Enables and disables Screen Magnifier (French keyboard layout only)
Press F7 + F2	Enables and disables zoom
Hold F7 + F4/F5	Zooms In and Out
Hold F7 + Up/Down/Left/Right to Pan Up/Down/Left/Right	Moves around the image
Tab	Move Forward
Shift+Tab	Move Backward
Ctrl+Alt+Shift+T	Expands or Collapses the toolbar

As you navigate with Screen Magnifier, each newly selected element will appear on the center of the screen.

Note

When using the French keyboard layout, press and hold **CTRL+ALT+SHIFT + ?** to enable and disable the Screen Magnifier.

Enabling Windows Magnifier

If you are using a Windows virtual desktop session, please use Windows Magnifier to make part or all of your display larger.

- Press and hold the Windows logo#key+the Plus#key (+) to turn Magnifier on or off.

WorkSpaces Thin Client specifications

Topics

WorkSpaces Thin Client device specifications

Size	3.38″ x 3.38″ x 2.99″ (86 mm x 86 mm x 77 mm)
Weight	513 g (1.13 lbs)
Processor	Octa-core 4x 2.2 GHz 4x 2.0GHz
GPU	800 MHz
Storage	16 GB internal
Memory	2 GB internal
Wi-Fi	Wi-Fi 6E Tri-band. Also supports 802.11a/b/g/n/ac/ax Wi-Fi networks. For Wi-Fi 6E support, WorkSpaces Thin Client must be connected to the 6 GHz band of a Wi-Fi 6E network by using WPA3 encryption.
Ethernet	Supported
Ports	HDMI 2.1 Output, Power, USB-A 2.0, Ethernet port 10/100 Mbps **Note** The HDMI 2.1 Input port and IR Extender port are not supported.
Output display resolution	1080p

Data connection requirements	High-speed internet connection through Wi-Fi or built-in Ethernet port and a power outlet. High-speed HDMI cable rated at 18 Gbps or higher. Wi-Fi 6E router required for Wi-Fi 6E support.

USB hub specifications

> **Note**
>
> The specifications listed are for the Zhenyou EVT hub (USB-A) - ZYHB03 hub.

Display Port	1 x HDMI port (support up to 1080p @ 30 Hz, mirror or extended display)
USB Port	4 x USB 3.0 ports
Power	1 x DC jack (support 5 V @ 3 A, O.D. 3.5 mm x I.D. 1.35 mm barrel connector)
Support OS	Android

Supported peripherals

You can use WorkSpaces Thin Client with different peripherals. Refer to the following to see if a specific peripheral is compatible with your WorkSpaces Thin Client.

> **Note**
>
> These devices have been verified to work with Amazon WorkSpaces Thin Client. Other peripherals can be used, but they may not be supported.

Keyboard

The layouts for all keyboards supported by WorkSpaces Thin Client are listed in Keyboard Layouts.

- Amazon Basics Low-Profile Wired USB Keyboard with US Layout
- Cherry DW 9100 SLIM Keyboard and Mouse Combo, US Layout
- Hyundai HY-MA75 wired USB interface mouse and keyboard set, US Layout
- Dell Keyboard-KB212, US Layout
- Dell Keyboard-KB216, US Layout
- Dell KB216 Keyboard, Spanish (Latin America) Layout
- Logitech MK120 Wired Keyboard and Mouse Combo, US Layout
- Logitech K120 Wired Keyboard, US Layout
- Logitech K120 Keyboard, French Layout
- Logitech K120 Keyboard, Spanish Layout
- Logitech K120 Keyboard, UK Layout
- Logitech K280e Pro Wired Business Keyboard, QWERTZ German Layout
- Logitech K580 Wireless Keyboard, US Layout
- Logitech MK320 Wireless Keyboard and Mouse Combo, US Layout
- Logitech MK330 Wireless Keyboard and Mouse Combo, QWERTY Italian Layout
- Logitech MK270 Wireless Keyboard and Mouse Combo, US Layout
- Logitech MK270 Wireless Keyboard and Mouse Combo for Windows, QWERTZ German Layout
- Logitech Signature K650 Wireless Keyboard, US Layout
- HP Black KU-1156, US Layout
- HP CS10 Wireless Keyboard Mouse Combo, US Layout
- HP Wired Desktop 320MK Mouse and Keyboard

Note

Multimedia keys are not supported.

Mouse

- Logitech B120 Wired Mouse
- Logitech B100 Wired Mouse
- Logitech M90 Wired Mouse

- HP 200 Wireless Optical Mouse

Monitor

- Acer LCD Monitor KA2 series/KA272
- Lenovo ThinkVision 27 inch Monitor - P27h-20
- Lenovo ThinkVision 31.5 inch Monitor - P32p-20
- Samsung ViewFinity S6 S34A654UBN - S65UA Series - LED monitor - curved - 34" - HDR
- ViewSonic VA2447-MH 24" 1080p Monitor
- ViewSonic VG3456A

Webcam

- Logitech C270 HD Webcam
- Logitech C505E HD 720p Webcam
- AUSDOM Autofocus 1080P Webcam with Privacy Cover
- eMeet C950 1080P Webcam
- Cisco Desk Camera CD-DSKCAM-C-US

Headset

- Jabra Evolve 20 UC Wired Headset
- Jabra Evolve 30 Wired Headset
- Logitech H390 Wired Headset
- Poly EncorePro 520 Headset - Requires Adapter
  - Poly DA80 Adapter (Volume Control)
  - Poly DA85 Adapter (Volume Control)
- Poly EncorePro 525 Headset
- Sennheiser EPOS Impact 60 Wired Headset
- Cisco Headset 322 HS-W-322-C-USB
- Cisco Headset 532 CP-HS-W-532-USBA
- Cisco Wireless Headset 562 with Standard Base CP-HS-WL-562-M-US

> **Note**
>
> For all headsets, only the volume buttons are supported. Any additional media buttons are not supported.

USB hub

- Zhenyou EVT hub (USB-A) - ZYHB03

  Supports keyboard, mouse, webcam, headset, and dual screen extension.
- Anker 4-Port USB 3.0 Hub

  Supports keyboard, mouse, and either a webcam or headset.
- Sabrent 4-Port USB Hub

  Supports keyboard and mouse only.

Troubleshooting

Topics

Troubleshooting your WorkSpaces Thin Client device

If you are having issues with your WorkSpaces Thin Client device, check the following procedures for help.

Peripherals are not recognized

If your WorkSpaces Thin Client device is not recognizing the peripherals that you are using, first, verify that they are compatible with WorkSpaces Thin Client. See Supported devices for a list of compatible peripheral devices.

If your peripheral device is compatible with WorkSpaces Thin Client and is still not recognized by the device, do the following:

1. Turn off the WorkSpaces Thin Client device.
2. Disconnect the peripheral device.
3. Reconnect the peripheral device.
4. Check that the USB hub is connected to a power supply with the included hub power adapter.
5. Check that the USB hub is plugged into the WorkSpaces Thin Client device.
6. Turn on your WorkSpaces Thin Client device.
7. Select the **Settings** gear icon on the toolbar, navigate to **Peripheral devices**, and verify the peripheral names.

Unable to access WorkSpaces Thin Client workspace

If your WorkSpaces Thin Client device cannot access your virtual WorkSpace, do the following:

1. Go to the network settings on your device.

2. Check that the device is connected to your Wi-Fi network.
3. Refer to the network troubleshooting section of your virtual service interface:

   - For WorkSpaces, go to Troubleshoot WorkSpaces issues
   - For WorkSpaces Secure Browser, go to Troubleshooting
   - For AppStream 2.0, go to Troubleshooting

Volume on headset is very low or not audible

If you are experiencing volume issues with your headset, do the following:

1. Select the toolbar located on the right side of the screen. Go to **Settings** → **Peripheral devices**.
2. Scroll down to the Audio section and adjust the output volume.

> **Note**
>
> After a system restart, WorkSpaces Thin Client resets the volume level for connected USB headsets.

Audio crackles or has disturbances during audio-video conference calls

If you're experiencing audio issues with your WorkSpaces Thin Client, try one of the following procedures:

Check your WorkSpaces Thin Client device

1. Check that the audio USB headset is connected to the USB hub and that the USB hub is turned ON.
2. Check for supported peripheral devices to ensure that your device is supported.

If you are on the login screen of a VDI session

1. Select **Settings** at the top right of the screen.
2. Locate the device ID.
3. Run a diagnostic check and ensure that the device and advanced logging are both enabled.

If you are currently in a VDI session

1. Go to the toolbar on the right side of the screen.
2. Select **Settings** → **Peripheral Devices** → **Audio**.
3. Check that your USB headset is listed and that the volume is set to your desired level.
4. Check that the device is connected to Wi-Fi or Ethernet and that there is no issue with the connection to WorkSpaces.

If you are not currently in a VDI session

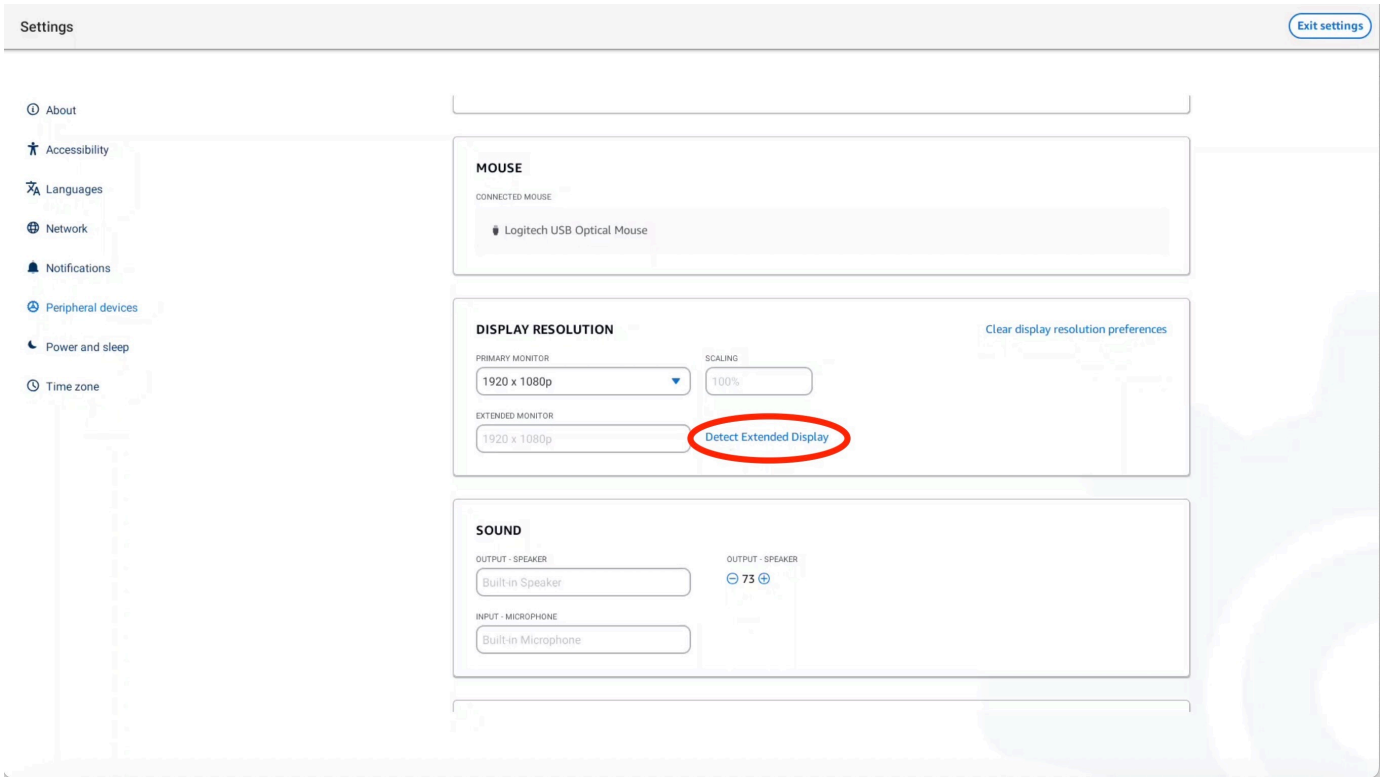
1. On the WorkSpaces login page, select **Settings** at the top right of the screen.
2. Locate the device ID.
3. Check that diagnostics and advanced logging are enabled.

Secondary monitor goes dark during VDI session

If your second monitor goes dark while you are using it, try one of the following procedures:

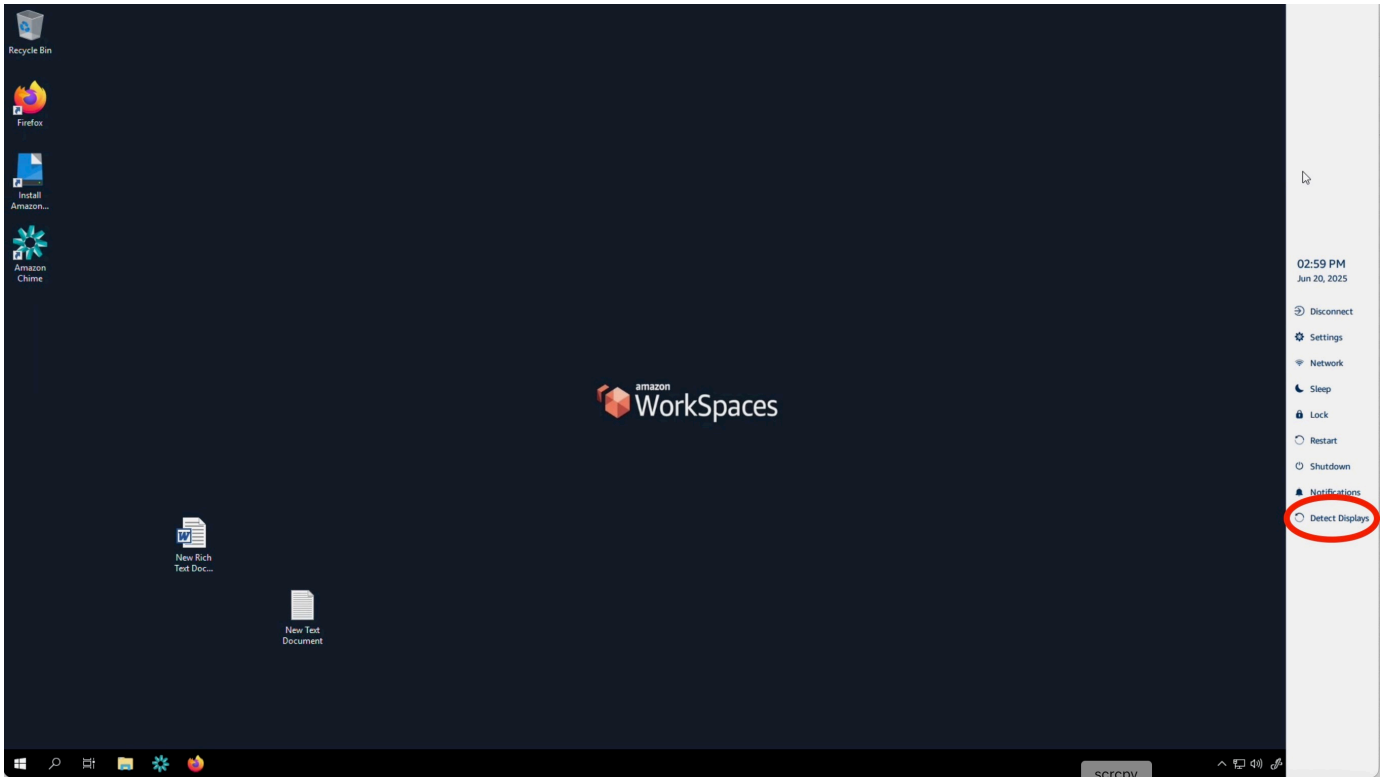
Detect display from Settings

1. Go to **Settings** then **Peripheral devices**.
2. Select **Detect Extended Display** under **DISPLAY RESOLUTION**.



Detect display from VDI toolbar

1. Open your VDI toolbar.
2. Select **Detect Displays** on the toolbar.



After doing either procedure, the secondary monitor should come back on. If the problem continues, restart your WorkSpaces Thin Client device.

Known issues for the WorkSpaces Thin Client

The WorkSpaces Thin Client has the following known issues.

If you select any link on the VDI login screen, you must return to the login screen.

Workaround: Select the Lock/Unlock button. This returns you to the VDI login, and a second monitor will mirror the primary monitor.

Using keyboard shortcuts may cause unexpected behavior.

Workaround: There is no workaround for this issue.

Some peripherals may not be recognized when the device is running.

Workaround: Unplug the device and then plug it back in or reboot the device.

You cannot view the IP address of the Ethernet network from settings.

Workaround: There is no workaround for this issue.

Some menu options in the VDI toolbar are displayed but not working.

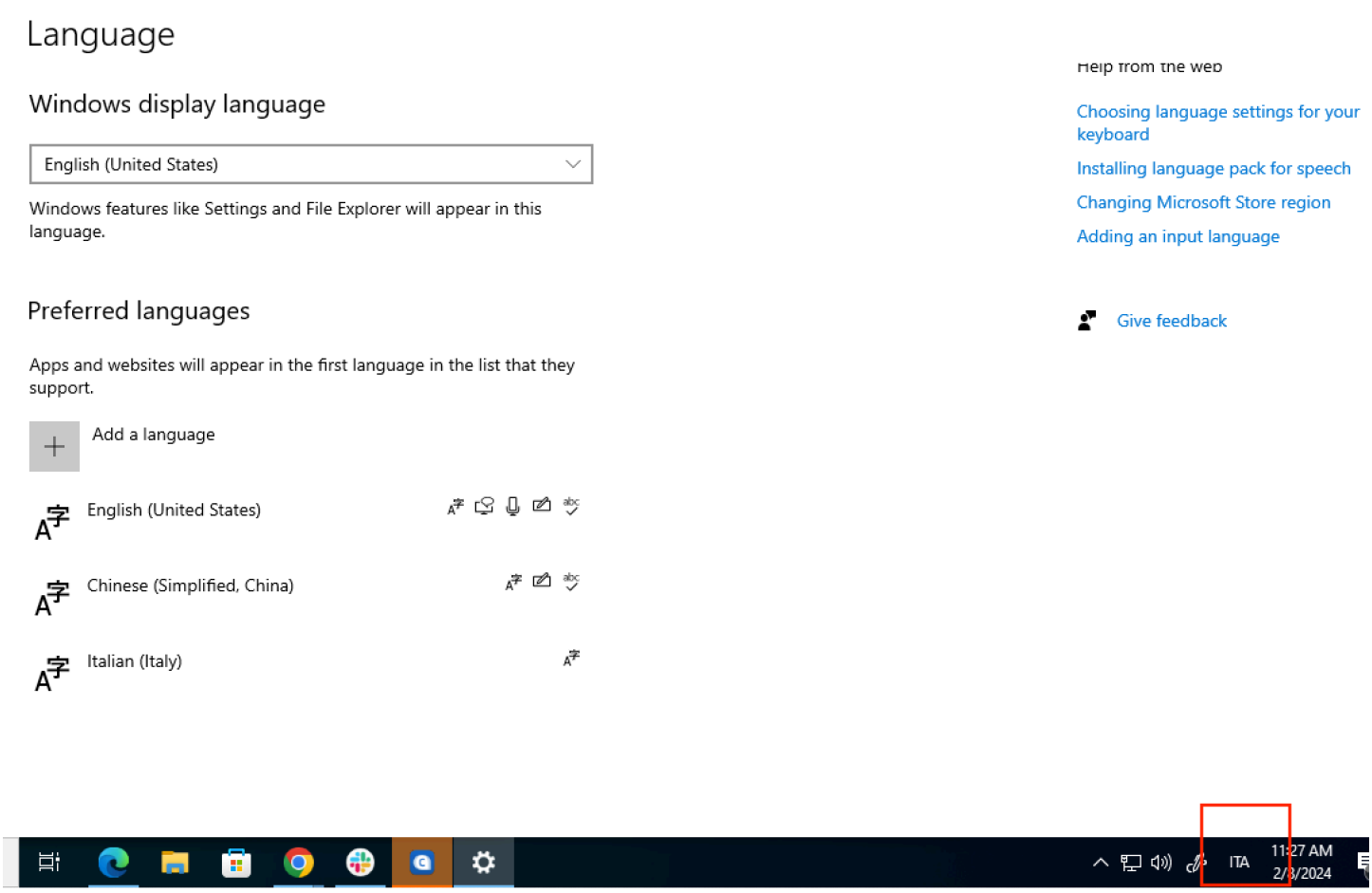
Workaround: These features are not enabled in this release.

You cannot find a supported keyboard layout in the OOBE or settings.

Workaround: Check that you are using software set 2.2.0 or higher. Check for the most current software set in WorkSpaces Thin Client software releases. You can also use an Ethernet connection if you cannot enter your Wi-Fi password without keyboard layout support.

You can select a supported keyboard layout in device settings, but you cannot enter the specific keys within the virtual session.

Workaround: Check that the input method within the session is set to the corresponding language. For example, if you want to use an Italian layout keyboard, set the input method to Italian within the session. See the following figure.



Toolbar does not expand or collapse when you select it for the first time.

Workaround: Make sure the mouse pointer is on the primary monitor and try expanding or collapsing the toolbar again. To expand the toolbar, select the dark area over the collapsed toolbar. To collapse the toolbar, select any area on the primary monitor.

On waking up from sleep, WorkSpaces Thin Client device shows the keyboard and mouse setup screen for a few seconds before launching the session.

Workaround: The keyboard and mouse setup screen should automatically go away. If the screen remains after a few seconds, unplug the device and then plug it back in or reboot the device.

On the restart of a WorkSpaces Thin Client device, end users will see repeated Getting Ready and Checking for updates transition screens before launching the session.

Workaround: None

Updates for the WorkSpaces Thin Client device are not taking effect.

Workaround: Restart the device after every system update.

The webcam is not enabled in WorkSpaces and its icon in the top toolbar remains gray.

Workaround:

1. Confirm your webcam is properly connected to your WorkSpaces Thin Client device.
2. Wait 30 seconds after your WorkSpaces session starts.
3. Check to see if your webcam is automatically enabled.
4. If it is still not enabled, restart your WorkSpaces Thin Client device and check again.

4K monitor not at full resolution

WorkSpaces Thin Client supports up to 3840x2160 (4K) resolution on the primary monitor. With the scaling factor, you can stream 4K in WorkSpaces. However, WorkSpaces Secure Browser might not support 4k yet.

Workaround: None.

WorkSpaces Thin Client Packet Loss notification.

Workaround:

The system may show no Packet Loss even if packet loss is occurring, please ignore the no packet loss message.

Keyboard power operation is not correct in device settings

If a keyboard is turned on/off using its native power switch, the status may not reflect accurately in the device settings.

Workaround:

None.

Headset volume change not reflected in device settings

For headsets with its own amplifier, pressing the volume button on the headset may not change the volume level shown in device settings.

Workaround:

None.

Screen shows multiple updating screen fragments after reset

On monitors with 2560 x 1440 resolution and after you reset the WorkSpaces Thin Client device, the monitors display the AWS updating screen tiled across them.

Workaround:

None. The device reset works as expected and the screen will return to normal.

Network icon opening Accessibility settings

Selecting the Network Icon on activation code screen may direct users to accessibility settings instead of network settings.

Workaround:

Enter your activation code to complete setup. The issue will resolve after the device updates to the latest software version.

Server error code 1001 during setup

Device encounters server error (code 1001) at the end of setup.

Workaround:

The device needs to be reset and set up again.

1. Select the network icon to open **Settings**.
2. Select **About**.
3. Select **Reset device**.
4. Set up your device. See *Setting up your Amazon WorkSpaces Thin Client service*.

FIDO2 pre-session details

The FIDO2 feature is in a prerelease state and has some limitations to its use.

Limitations:

- Only Yubico YubiKey 5 series USB security keys are supported with FIDO2/WebAuthn supported.
- Yubico YubiKey bio-metric keys are not supported.
- Registration flow requiring new PIN creation (i.e. `userVerification` set to `required`) is not supported. However if a PIN was previously set on the USB security key then it is supported.
- Cross-origin WebAuthn credential creation is not supported.
- Related Origin Requests are not supported.
- Origin must use https scheme. Origin with ports are not supported (e.g: `https//example.com:8443`).
- Only one USB security key can be connected at a time to the Amazon WorkSpaces Thin Client. Multiple USB security keys connected simultaneously is not supported.

Disconnected from your AppStream 2.0 session

When **Disconnect** on the toolbar is selected, you'll see a sign out page. This could be the regular AppStream 2.0 sign out page or a custom page your administrator set up. After signing out, the **Sign In** button is missing from both the toolbar and the sign out page.

Workaround:

Do one of the following:

- Restart the WorkSpaces Thin Client device.
- Unlock the AppStream 2.0 session by doing the following:

1. Select the **Lock** button on the AppStream 2.0 toolbar. The **Lock** page appears.
2. Select **Unlock**. The sign on page appears.
3. Sign in to start the session again.

Troubleshooting the virtual desktop interface

For information on resolving issues with your virtual desktop interface, refer to your VDI provider's documentation.

- For WorkSpaces, go to Troubleshoot WorkSpaces issues.
- For WorkSpaces Secure Browser, go to Troubleshooting.
- For AppStream 2.0, go to Troubleshooting.

Document history for the WorkSpaces Thin Client User Guide

The following table describes the documentation releases for the WorkSpaces Thin Client User Guide.

Change	Description	Date
• Enabling network alerts • Managing the display resolution • Positioning your toolbar	• Added a new section about network alerts. • Updated section covering display resolution. • Added a new section covering toolbar position.	October 28, 2024
• Using the toolbar • Managing the display resolution • Performing a screen capture	• Added a new section about using the toolbar. • Added a new section covering display resolution. • Added a new section covering screen capture.	September 6, 2024
• Managing networks • Deferring software updates	• Added new section for details on networks • Added new procedure for deferring software updates	July 8, 2024
• Using your WorkSpaces Thin Client device	• Device settings show up in a collapsed toolbar allowing better utilization of the visible screen • End users can now configure the duration to wait before the device sleeps on inactivity	April 5, 2024

Change	Description	Date
	• Volume levels set by end users now persists across device restarts	
• Keyboard layouts • Supported peripherals	• Added keyboard layout section • Added European supported keyboards and updated supported monitors	February 12, 2024
Initial release	Initial release	November 26, 2023