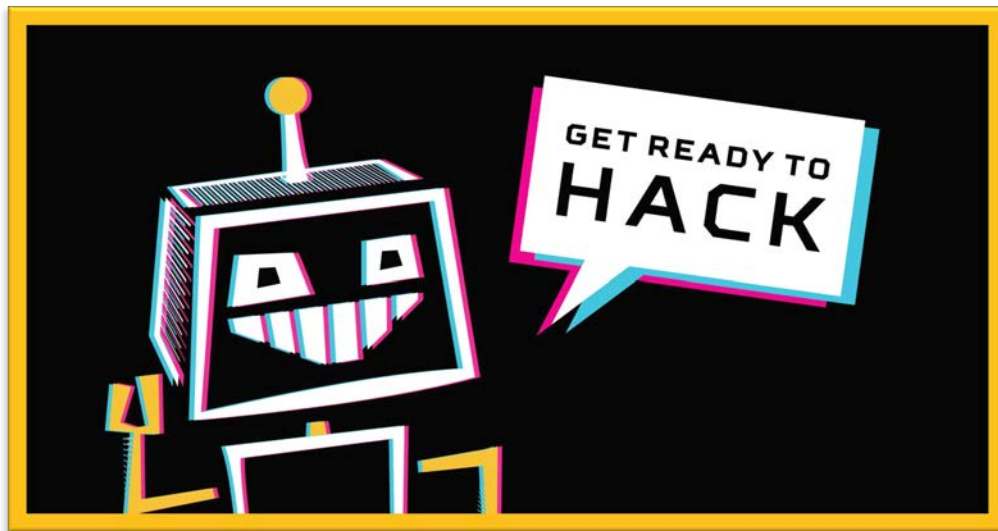# Rift Setup Guide

The Rift Setup Guide contains everything you need to set up and get started with your Oculus Rift. By the end of the guide, you'll know more about VR and the necessary equipment. The Oculus Rift is a consumer-facing product with multiple sources for online help, so look online for more help if you get stuck.

Table of Contents

Let's get started!

Intro to VR

Section Goal: Learn about VR and important health and safety information.

What is VR?

VR, or virtual reality, is the computer-generated simulation of a 3D environment. The two most common platforms for VR experiences are VR viewers and VR headsets. VR viewers are powered by smartphones; VR headsets like the Oculus Rift are powered by computers. You can use VR to try educational experiences, games, and much more.

A VR Headset, the Oculus Rift

A VR Viewer, the TechStart Hackybot 1.0

Health and Safety

When using VR, keep the following points in mind:

- The headset should only be used by individuals 13 years old and up.
- Take breaks regularly; we recommend a break every 15-20 minutes.
- Use VR in a clear and safe space.
- It's a good idea to have someone assist you, especially when first trying VR.

Full health and safety information for using the Oculus Rift can be found at: oculus.com/legal/health-and-safety-warnings. The Oculus Rift can interfere with certain medical devices and may cause discomfort while viewing experiences, so it is important to review these health and safety warnings before using your headset.

Unboxing Your Rift and Touch

Section Goal: Unbox your Oculus Rift and Touch Controllers.

Equipment

To get started, you will need your Oculus Rift and Touch Controllers box.

Oculus Rift and Touch Controllers Box

In Case You Were Wondering

Touch controllers enable you to have a more immersive VR experience by tracking your hands. Some experiences require Oculus Touch controllers, but others allow you to optionally play with a game controller or Oculus Remote. You can check requirements for experiences when you download from the Oculus Store.

Open the Oculus Rift box. The box should contain: one Oculus Rift headset, one sensor, one controller, one set of batteries, a USB extension cord, a Bluetooth USB for the controller, and one Oculus Remote.

Equipment from the Oculus Rift Box

Open the Oculus Touch Controllers box. The box should contain: two Oculus Touch Controllers, one sensor, two batteries, and a guitar knob (for Rock Band VR).

Equipment from the Oculus Touch Controllers Box

Oculus Setup

Section Goal: Set up your Oculus Rift!

Equipment Setup

1. Plug the Rift's two cords into the HDMI and USB 3.0 ports on your computer.

The Oculus Rift connects to a computer via a USB 3.0 and HDMI cable.

In Case You Were Wondering
USB, or universal serial bus, is a standard connection cable and allows devices to transfer information. Blue USB ports like the one pictured above are "USB 3.0" ports and enable faster data transfer. HDMI, or high-definition multimedia interface, is a connection optimized for transferring audio and video data.

2. Plug your two Oculus sensors into the other USB ports.

The ports to connect the sensors.

In Case You Were Wondering
Note the USB ports for the Oculus Sensors are not blue. These USB ports are "USB 2.0" ports and not as fast as the blue USB 3.0 port, but still fast enough for the Oculus sensors.

3. Use the following image as a reference point if you get stuck on where connections go. The laptop should be connected to the charger while using VR.
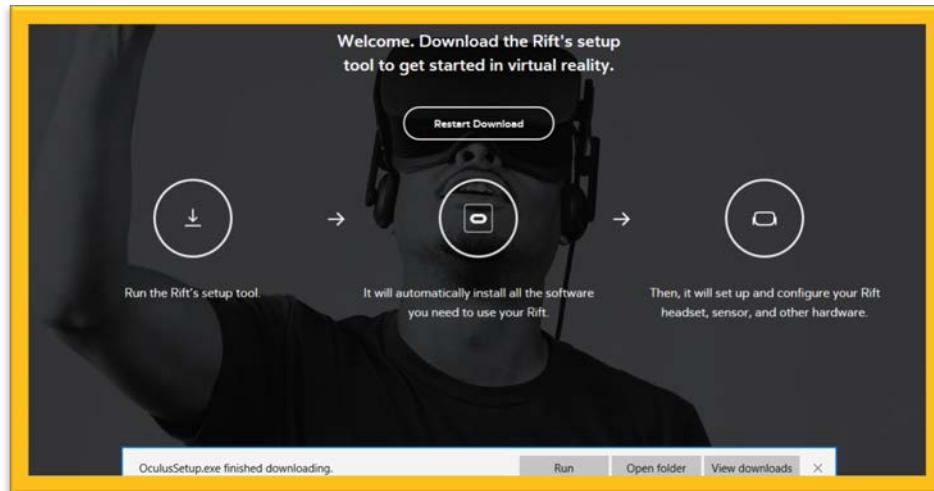

Reference image for all connections.

4. Go to the Oculus Rift Install page and click "Start Download."
    1. Link: www3.oculus.com/en-us/setup/
5. Once the download is complete, press the "Run" button. Follow the directions to install, setup, and configure your Oculus Rift.

Download the Oculus Rift software.

Oculus Installation

Read the following for important points on the steps to setting up your Oculus Rift.

In Case You Were Wondering
For help on any of the following steps, consult the Oculus Product Guide.
Link: product-guides.oculus.com/en-us/documentation/rift/latest/concepts/book-rgsg/

1. Create an Oculus account. Important points:
    1. A teacher or person responsible for the equipment should create the account. Do not forget the username and password. TechStart will not be able to help if you forget the username or password.
    2. You should use one account for all of your experiences.
    3. Set your privacy to "Only You" unless you prefer not to.
   4. Decide if you want to add a payment method. Press "Skip" if not.

5. If you do add a payment method, you will need to create a PIN. The PIN must be entered every time a purchase is made. Only share the PIN with individuals that should be able to use the provided payment information.
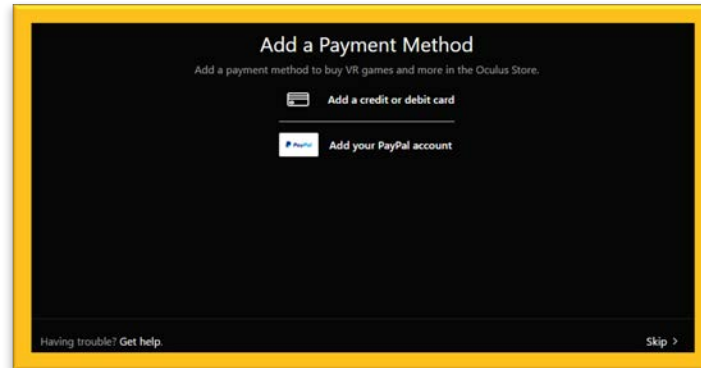
Be cautious if you enter payment information.

2. Choose a space to set up your Oculus with empty space to move comfortably.

3. The directions on your screen will prompt you to set up the Oculus Remote.

   1. Remove the plastic tab before you try to set up the Remote

4. Optional: Set up the Xbox One Wireless Controller if you have a USB C to USB A converter. If you do not, you will only be able to connect one of the Xbox One Wireless Controller or the set of Touch Controllers at a time.

   1. Plug in the Wireless Xbox Receiver.

   2. Insert batteries (provided in the box) in your Xbox One Controller.

   3. Find and press the sync button on the connector and controller. The controller may take a few tries to connect, but will prompt you to retry.
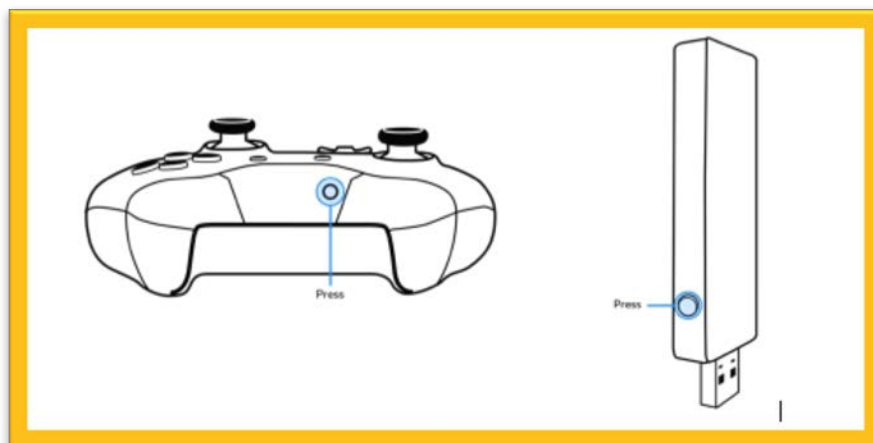
Press the buttons shown to sync the controller and connector.

5. Set up the Oculus sensors.
    1. Remove all chairs and desks from the immediate area to set up the sensor.
    2. Place the sensors 3-6 feet away from your head, facing you
    3. Don't use an area where people will walk between you and the sensor
    4. Place the Oculus on a stable surface so the headset doesn't fall or move.
    5. Place the sensors slightly above your headset, if possible.
    6. Every time you move the sensors, you need to set them up again, so if you have many users, share the setup directions.
6. Set up the Oculus Touch controllers.
    1. Follow prompts like the one pictured below to set up controller tracking.
    2. You might need to adjust your sensors a few times. Read the on-screen directions carefully if you get stuck.
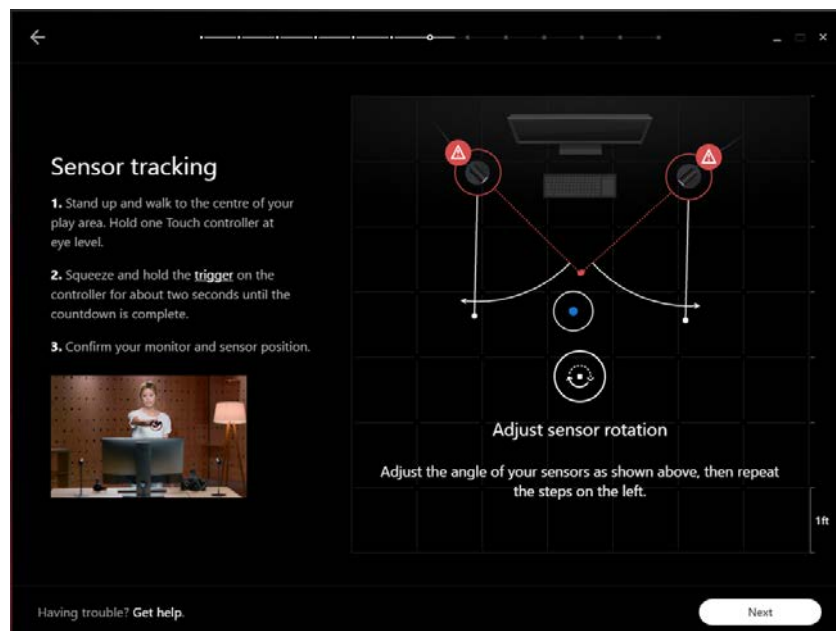
7. Follow the on-screen instructions to set up your Guardian System.
    1. The Guardian System warns you when you are running out of virtual space.
    2. Every time you move the sensors, you will need to set up your Guardian System again, so if you have many users, share the setup directions.
8. Personalize Your Rift
    1. Use the side tabs on the headset straps to get a comfortable fit.
    2. Each user will have to customize their headset to fit comfortably.

Oculus Home

Section Goal: Learn the basics of Oculus Home, the application for using the Oculus Rift.

Home and Navigation

Home is a virtual store and library environment which first appears when you put on the Oculus Rift.

1. If you are using the Oculus remote, navigate using the thumb panel and press the center to select.
2. If you are using your Xbox controller, navigate by pressing the left joystick and press "A" to select.
3. If you are using your Touch controllers, navigate by moving your hands to point at items and press the trigger on the appropriate hand to select.

You can also access Oculus Home without wearing the Oculus Rift. Simply click on the "Oculus" shortcut on your Desktop. If you do not see a shortcut, you can search for "Oculus" in the Windows search panel.
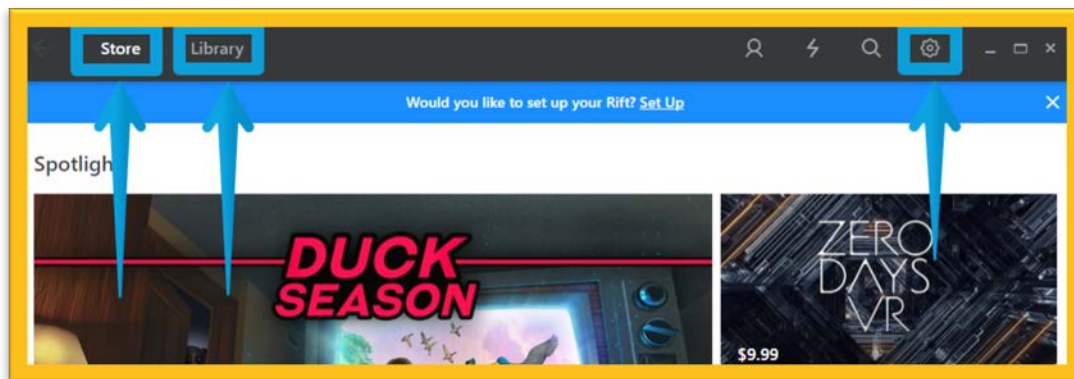

Access Oculus Home without a headset.

When accessing Oculus Home without the headset, the most important buttons are the Store, Library, and Settings (represented by a gear icon). The Store and Library

show you VR content. The Settings enables you to configure many settings and most importantly redo your setup if necessary.

The Store, Library and Settings Buttons

Inside of the Settings screen, you can select the Devices tab if you ever need to reset your equipment. For example, if you move your Oculus Rift equipment, you should redo the setup by selecting "Full Setup."
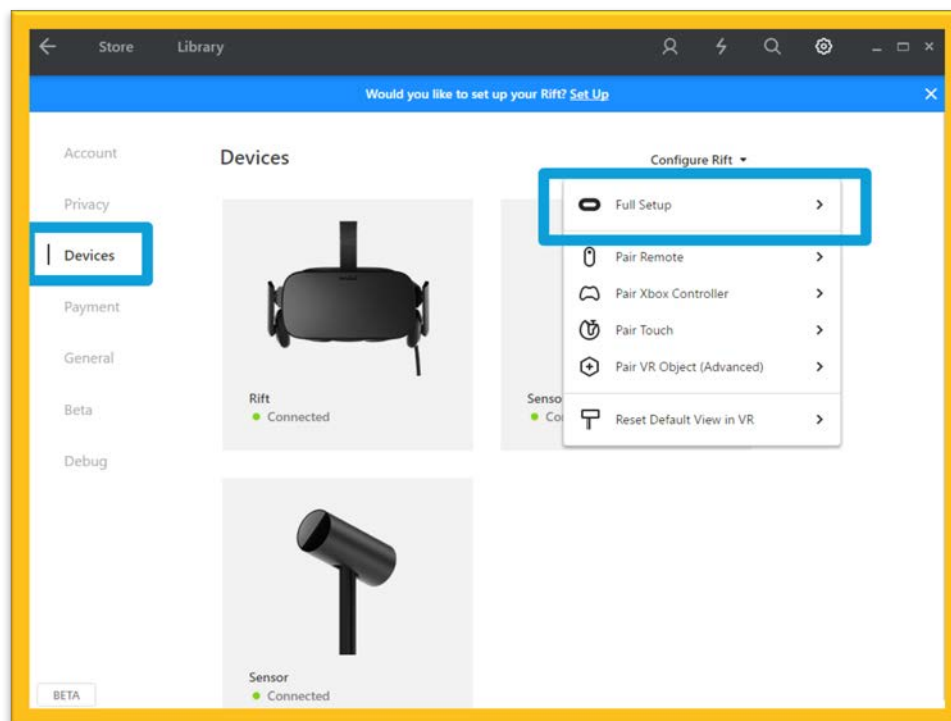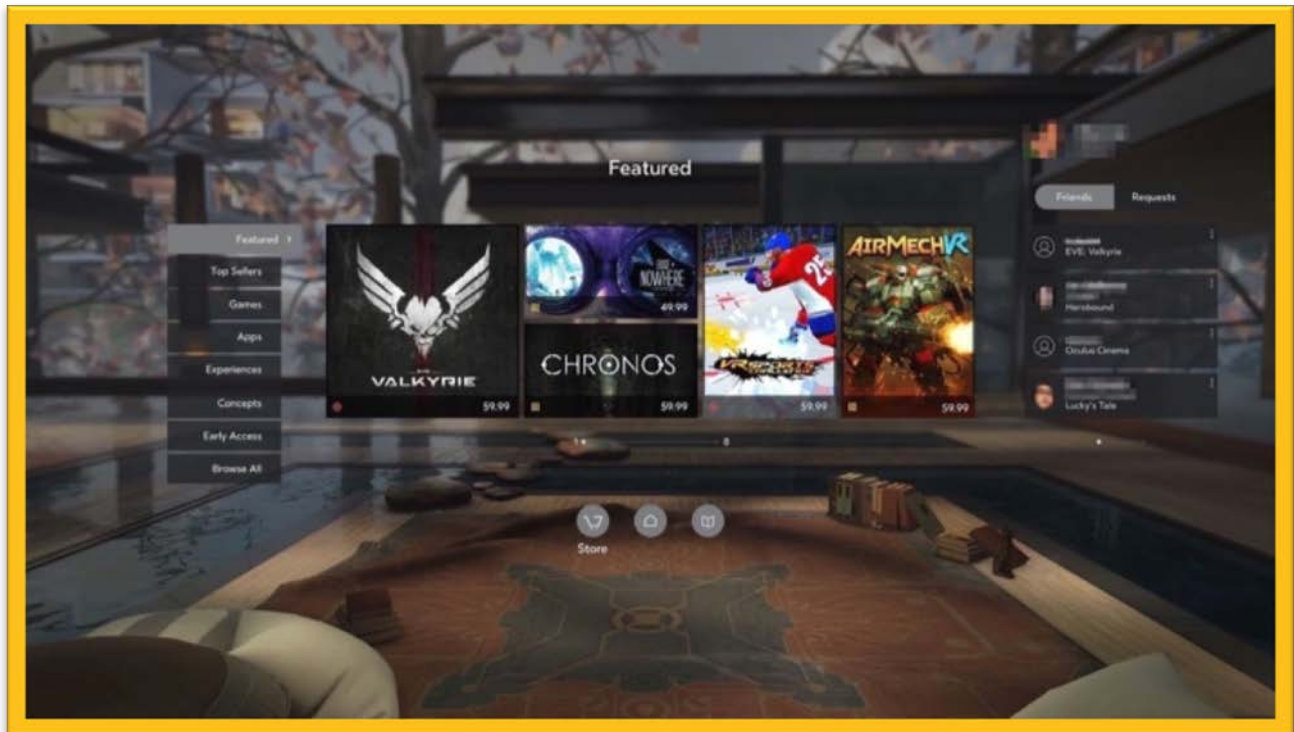

Select "Full Setup" to run the setup for your Rift at any time.

Oculus Store

The Oculus Store is used to find and download VR experiences. The rest of the section assumes you are navigating Oculus Home while wearing the headset. Feel free to also explore Oculus Home without the headset.

1. Select the Oculus Store icon shown on the bottom of the Oculus Home screen.

The icons at the bottom of the Oculus Home screen help with navigation.

2. Search for experiences by subject or type. When you click on a game or app, you'll see a main page with information such as comfort, controller needs, and more.
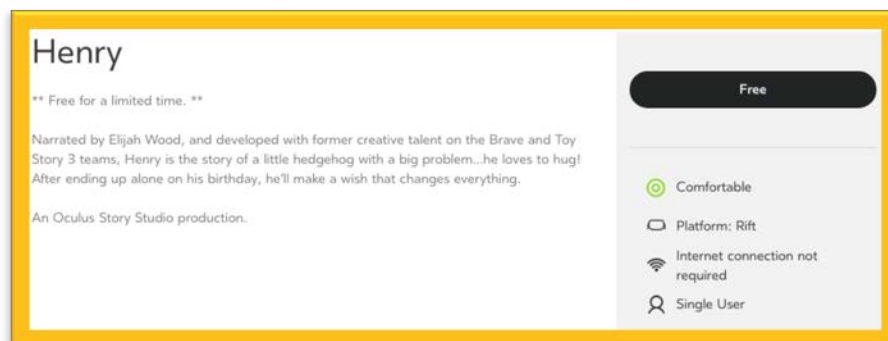
Details for the Henry Experience

3. Only download experiences if:
    1. They are approved by the individual in charge of the equipment.
    2. They are free or you have purchase approval.
4. The app will appear in the Oculus Library while downloading.
5. After you've downloaded a game or app, select the blue Start button and jump in!

Oculus Library

1. Select the Oculus Library icon in the lower right of the Oculus Home Screen. The Oculus Library shows your currently installed games and apps.
2. The left panel shows tabs to filter content.
    1. Installed – experiences you've downloaded on your current computer.
    2. Updates – experiences that need updates.
    3. Not Installed – experiences you've previously downloaded or purchased, but that aren't currently installed.
3. To leave your Library and go back to your home screen, press the back button on the controller or select one of the icons at the bottom of the screen.

Giving a Demo

1. When giving a demo, be sure to:
    1. Explain the controls.
    2. Talk through what the user might see and how the user might feel.
    3. Warn your user that some people experience motion sickness.
    4. Start with "Comfortable" experiences for first-time users.
2. When trying VR, you always want to have a clear and safe space.
3. First time users should be accompanied by someone to assist on the experience.
4. Show your user how to adjust settings, including headset fit and focus.
5. Experienced users should only use Oculus for about 30 minutes at a time, but beginning users should take a break every 15-20 minutes.

Support

Section Goal: Understand where you can get help on Oculus Rift Issues.

Common Issues and Solutions

You'll be able to find solutions to common issues on the internet.

1. The Oculus Support page has common issues listed.
    a. Link: https://support.oculus.com/help/oculus
2. If you search for "Oculus Common Issues" online, more options come up with other guides, some with pictures and videos that might be helpful.

Troubleshooting and Problem Solving

Check out the following for how to fix a problem yourself.

1. Notify your teacher immediately with details about the problem.
2. Try to identify your problem by retracing your steps and thinking critically about what part of the system might be affected. Ask yourself:
    a. Is this a hardware problem (something physically broken) or a software problem (something wrong with the Oculus Rift drivers or apps)?
    b. Is everything set up correctly?
    c. Are batteries charged and systems plugged in?
    d. Did I skip a step?
3. Use a search engine to research about your problem. Make sure you are descriptive and use Oculus terminology to receive the best results. If a search does not work at first, change your words to express yourself more clearly.
4. Try searching directly in the Oculus Forums, where many users post problems and solutions. You can narrow down the forum by categories or search popular tags.
    a. Link: https://forums.oculus.com/community

Last Resort: Oculus Support

Do not use Oculus Support until you have exhausted all other options and checked through the lists above. Troubleshooting through hardware and software problems is a

critical skill that can be learned. Most problems can be fixed and have been fixed before, so look for other users' solutions online. If you need Oculus Support:

1. Oculus Support can take multiple business days (Monday – Friday) to get back to you, so make sure you have tried everything else before contacting them.
2. As a last resort, you can file a support ticket. To get a helpful response, you must give as much detail about the problem as possible.
    a. Link: https://tickets.oculus.com/hc/en-us/requests/new
3. Choose a request type from the drop-down menu that best fits your situation.

Submit a request

Please choose a request type below

I am having issues with registration or with my existing Oculus account

I am having payment issues or would like to request invoice information

I would like to provide feedback on Oculus products or services

I would like to report abuse by another User

My question or issue is not listed above

4. Enter the e-mail address associated with your account
5. Write a subject that describes the problem in just a few words.
6. Write a detailed description that answers all or most of the questions below. Save a copy and send them to the individual in charge of the equipment to save.
    a. When did the problem start?
    b. What you were doing immediately before the problem started?
    c. Is your Oculus not working at all or is it a specific problem that happens every time you try to access a feature?
    d. Can you replicate the problem? If so, how exactly?
    e. Did you already try restarting your computer? What other solutions have you already tried?
    f. What do you think the problem and solution might be?
7. Only the sections of the form labeled with a red * are mandatory to fill out, but you should fill out all sections if you can.
8. Attach any evidence of your problem to help Oculus Support develop a clear idea of the problem. You might want to attach the following:
    a. A screenshot of your computer when the problem is happening.
    b. A photo if this is a visible problem on the Oculus Rift.
    c. Any other evidence that might be helpful to a support person.
9. Let the individual with the account's email address know they should expect an e-mail from Oculus support with a solution or requesting more information.