

Loading Oculus Quest Apps via CodeWorks

2019-01-15

Requirements:

1. PC running Windows 10 (Win7 won't work), Linux or MacOS
2. USB cable – C-to-C? or A to C? Depends on your computer ...

Summary:

1. Create Developer Account..... One time
2. Download and Install OCULUS ADB Drivers One Time
3. Download and install CodeWorks One Time
4. >> RESTART PC << One Time
5. Enable Developer Mode on Oculus Quest One Time
6. Transfer VR Sim to Quest!

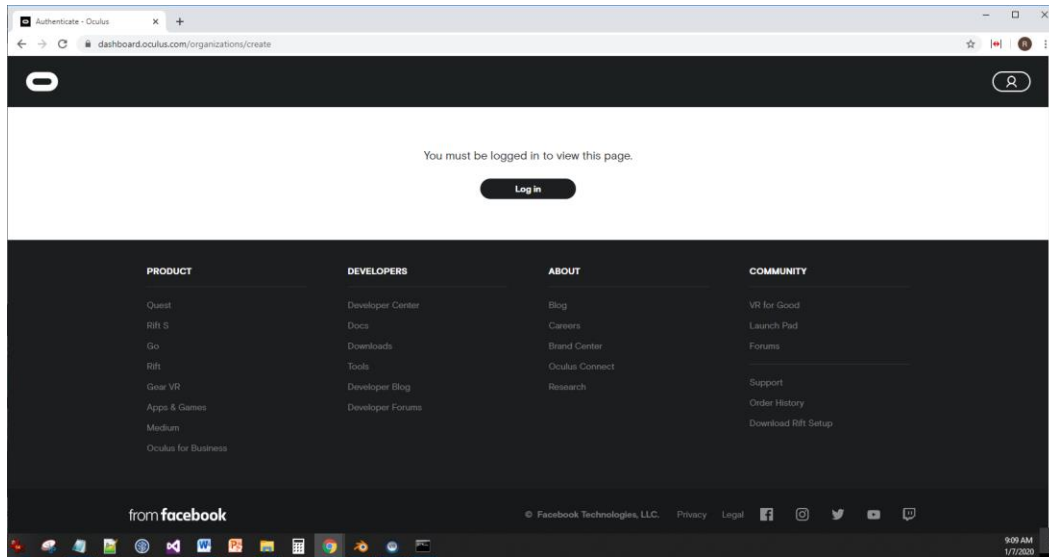
Presented by:



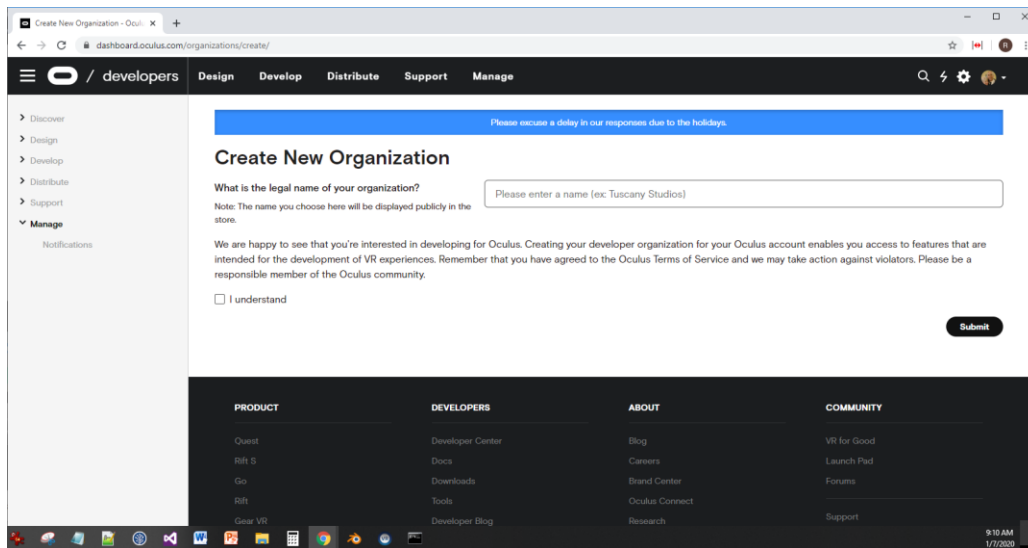
CAUTION: The initial setup is a bit tedious ... be patient ... once you have done it though, you only need to do Step 6 (and maybe Step 5) for every new upload which is quick and easy!

Detailed Walkthrough:

1. Create a developer account (its free) at this link:
<https://dashboard.oculus.com/organizations/create/>

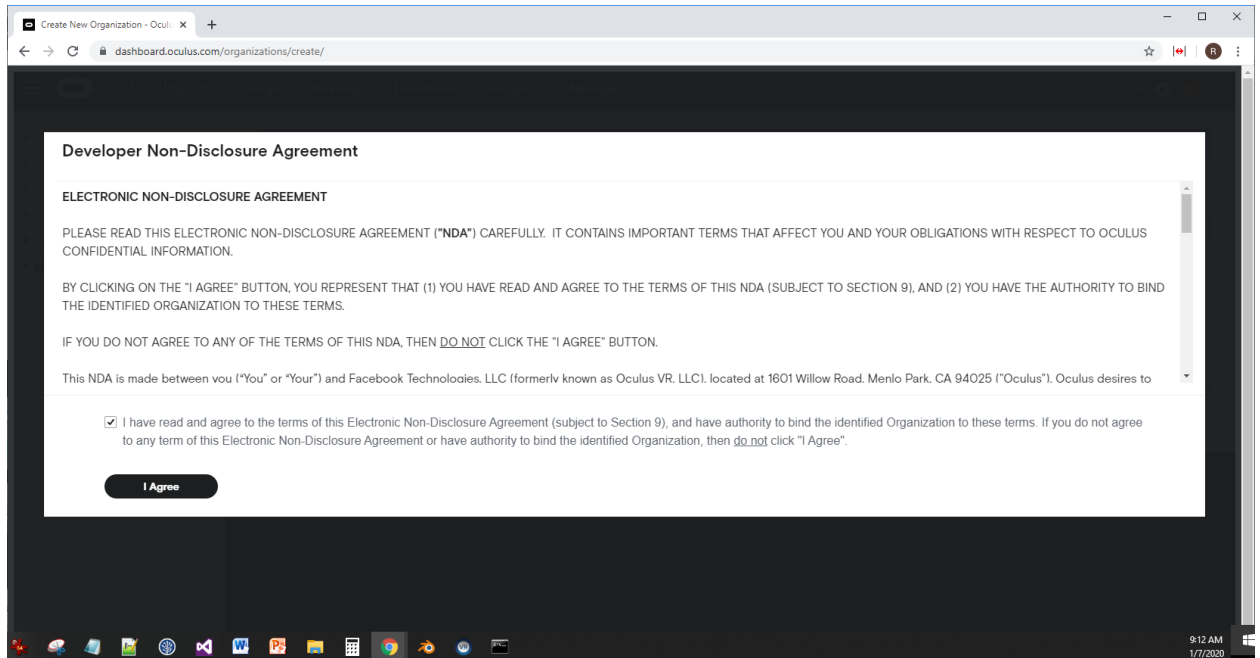


Login to YOUR Oculus Account (associated with your Oculus Quest) to get to this screen:



>> Enter any organization name you want. It just needs to be unique.

Agree to terms:



Create New Organization - Oculus X

dashboard.oculus.com/organizations/create/

Developer Non-Disclosure Agreement

ELECTRONIC NON-DISCLOSURE AGREEMENT

PLEASE READ THIS ELECTRONIC NON-DISCLOSURE AGREEMENT ("NDA") CAREFULLY. IT CONTAINS IMPORTANT TERMS THAT AFFECT YOU AND YOUR OBLIGATIONS WITH RESPECT TO OCULUS CONFIDENTIAL INFORMATION.

BY CLICKING ON THE "I AGREE" BUTTON, YOU REPRESENT THAT (1) YOU HAVE READ AND AGREE TO THE TERMS OF THIS NDA (SUBJECT TO SECTION 9), AND (2) YOU HAVE THE AUTHORITY TO BIND THE IDENTIFIED ORGANIZATION TO THESE TERMS.

IF YOU DO NOT AGREE TO ANY OF THE TERMS OF THIS NDA, THEN DO NOT CLICK THE "I AGREE" BUTTON.

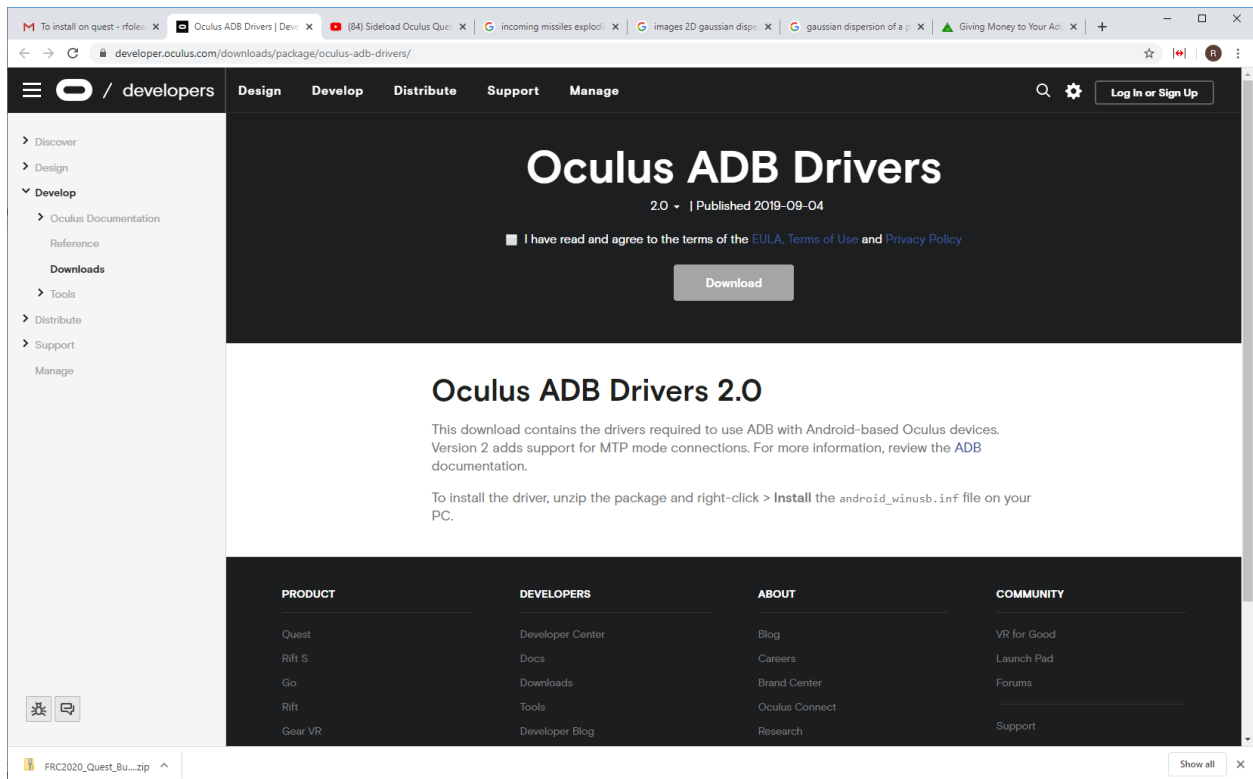
This NDA is made between you ("You" or "Your") and Facebook Technologies, LLC (formerly known as Oculus VR, LLC), located at 1601 Willow Road, Menlo Park, CA 94025 ("Oculus"). Oculus desires to

☒ I have read and agree to the terms of this Electronic Non-Disclosure Agreement (subject to Section 9), and have authority to bind the identified Organization to these terms. If you do not agree to any term of this Electronic Non-Disclosure Agreement or have authority to bind the identified Organization, then do not click "I Agree".

I Agree

9:12 AM
1/7/2020

2. **Download the Oculus ADB Drivers (Windows Only, skip this for Linux or MacOS)** to allow PC to transfer files to Oculus Quest. <https://developer.oculus.com/downloads/package/oculus-adb-drivers/>



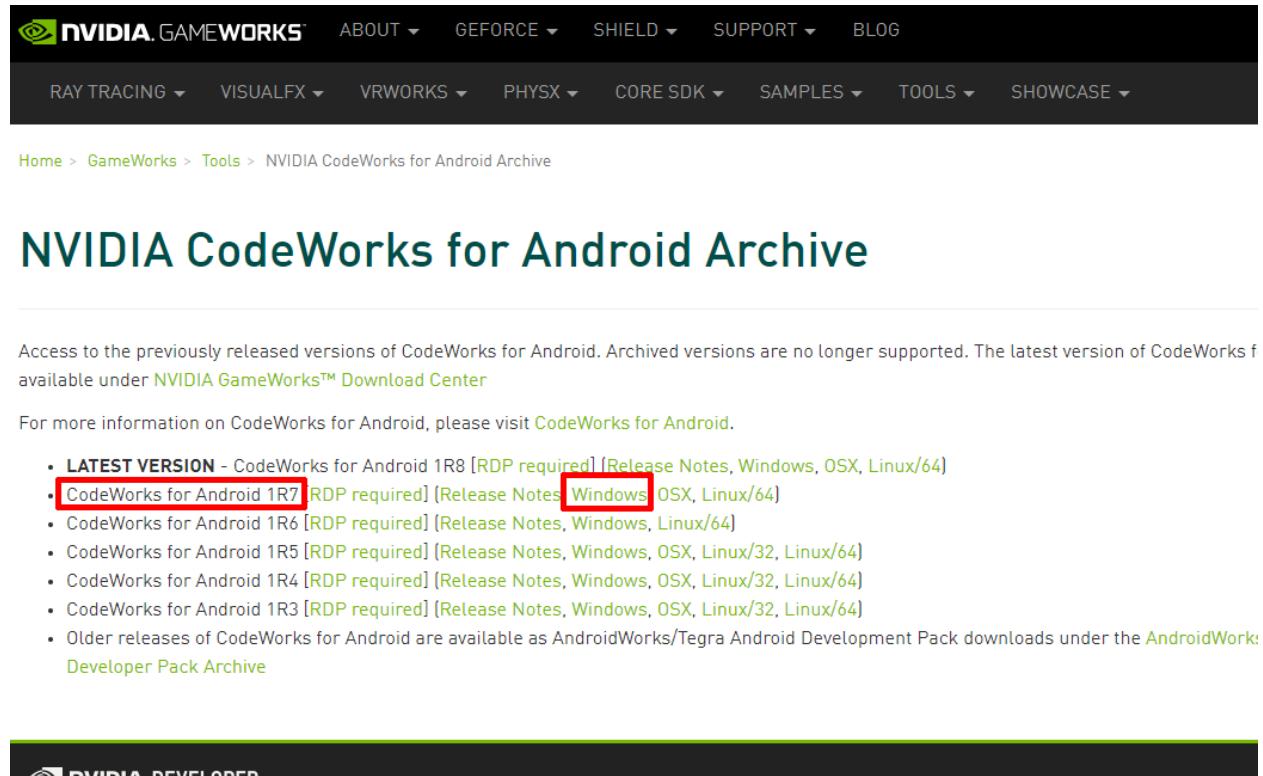
Click the check box, Unzip and locate: oculus-go-adb-driver-2.0/usb_driver/**android_winusb.inf**

Right Click on Android_winusb.inf and select “INSTALL”

3. Download **Code Works 1R7** (**Don't** download the most recent version)

Location: <https://developer.nvidia.com/codeworks-android-archive>

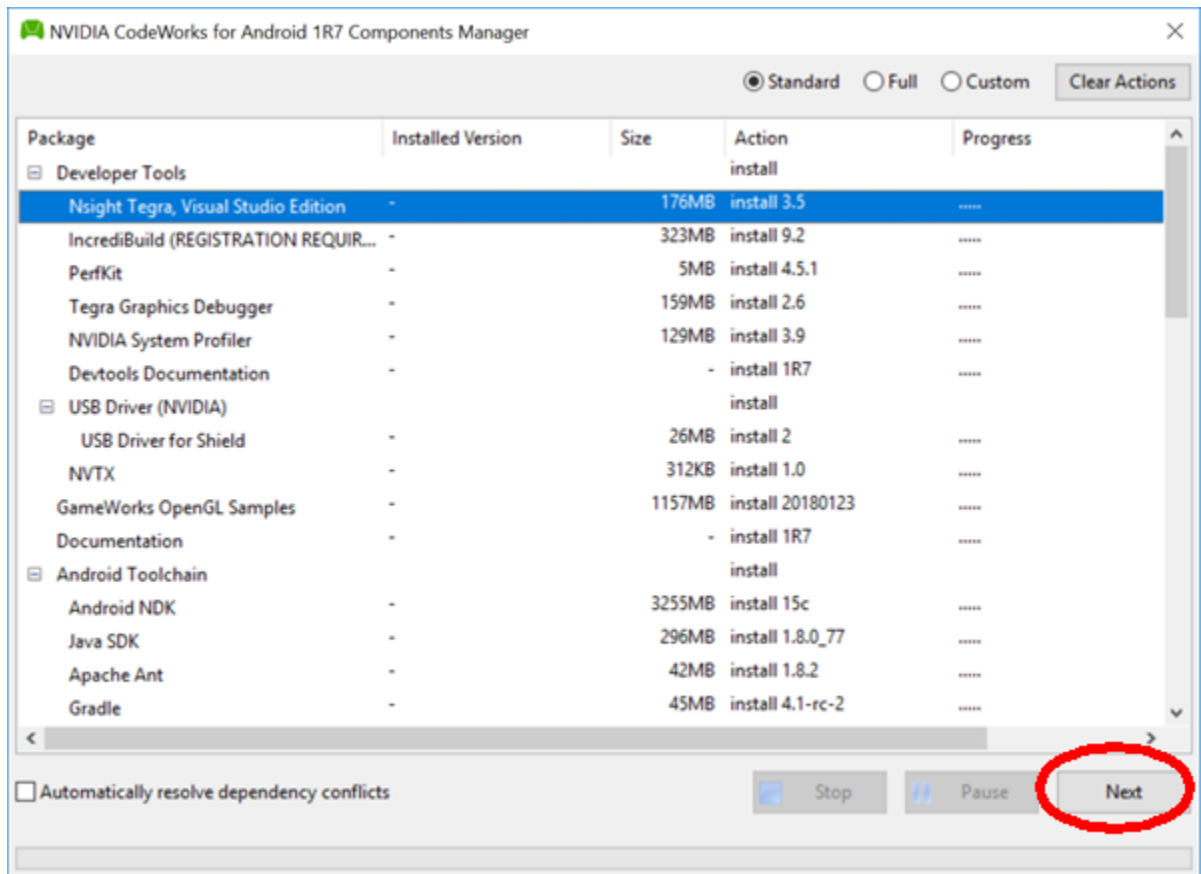
You will need to create an account.



(I'm using Windows so I selected that one – be sure to choose the one YOU need)

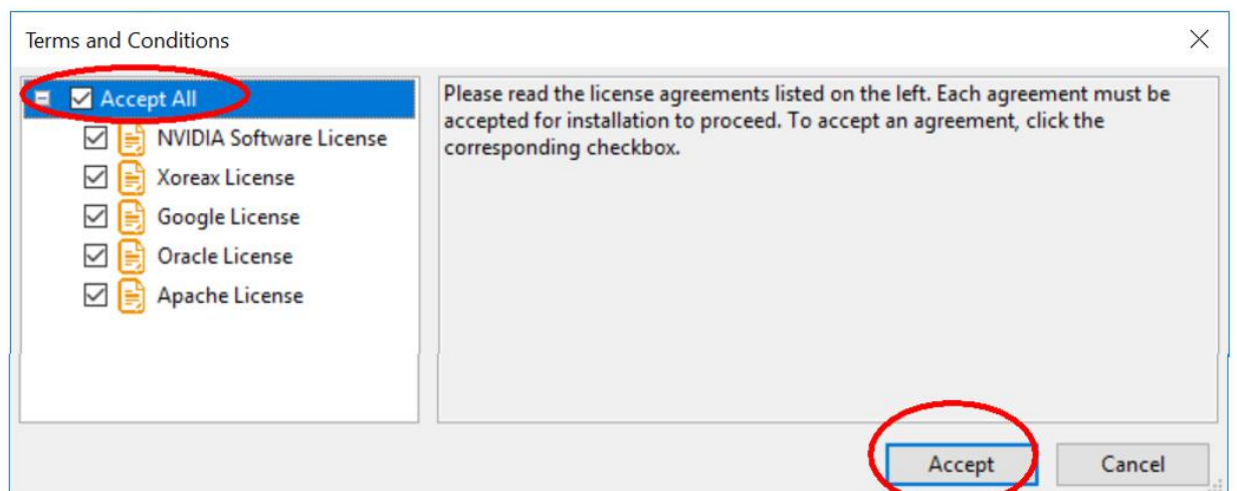
Install CodeWorks.

Keep going until you get to this screen:



Click on NEXT.

On this screen click on Accept All CHECK BOX, then ACCEPT:



Be patient – takes a while to install ...

4. >> **IMPORTANT: Restart PC** <<

5. **Activate Developer Mode on Oculus Quest:**

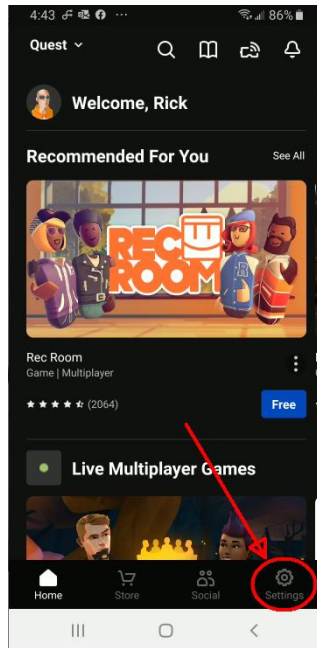
a. Open Oculus App on mobile device/phone and click on SETTINGS

b. Connect to Headset under SETTINGS (Get Green Dot)

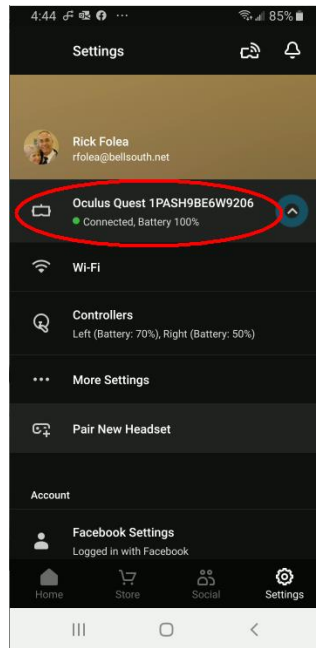
>> Need to be on same network, of course

c. Open drop down menu for your headset (down arrow):

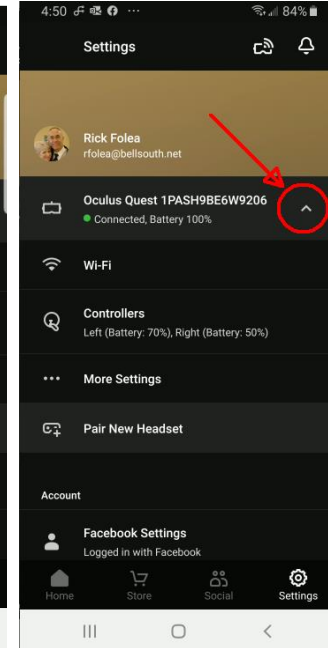
a. Open



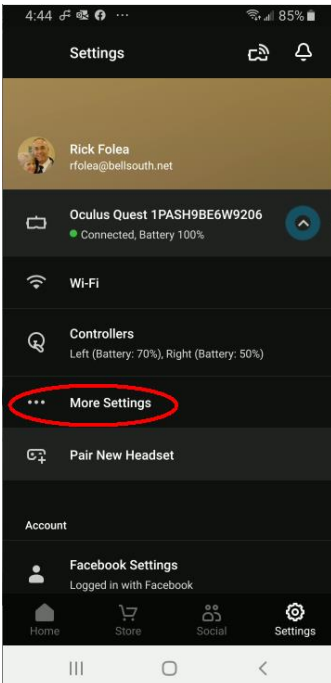
b. Connect



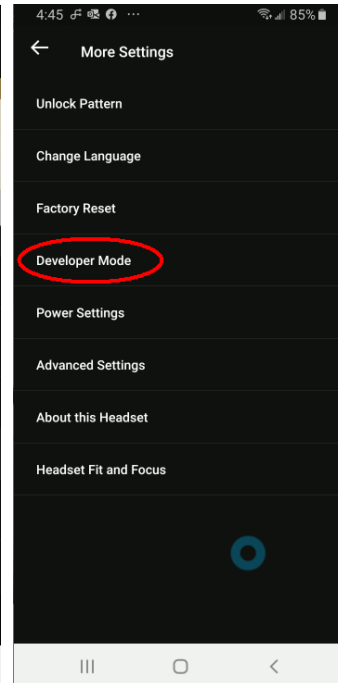
c. Drop Down menu



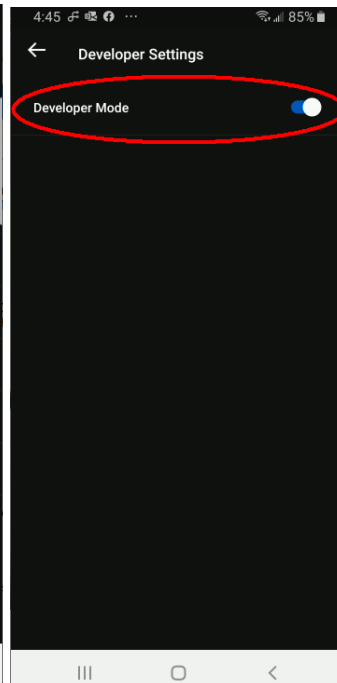
Click on "... More Settings"



Click on "Developer Mode"



Toggle Developer Mode to ON

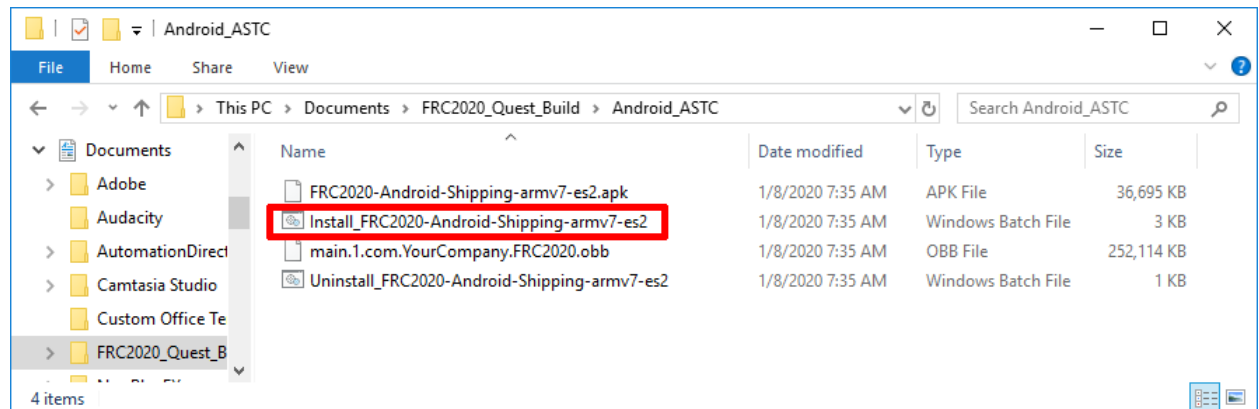


6. Transfer FRC VR Sim to Quest

Connect PC to Oculus Quest using USB Cable.

Note: If your computer doesn't have a USB-C port, then the USB cable that comes with the quest won't work. I use the USB-A to USB-C cable from my cell phone instead.

Put your headset on to wake it up and then double click on install file on your PC screen (not the headset) included in the Quest 2020 FRC VR Sim Download (Yes it's awkward)



Depending on your setup, you will probably see a notification on the headset asking you to allow USB DEBUGGING.

Click on “Always Allow” checkbox and OK.

A black command prompt screen will pop up and you will see all the progress of the transfer.

You can take the headset off while it is loading if you want to.

It will stop here for about 10 seconds:

```
Select C:\WINDOWS\system32\cmd.exe
C:\Users\rfolea\Documents\FRC2020_Quest_Build\Android_ASTC>for /F "delims=" %A in ('C:\NVPACK\android-sdk-windows\platform-tools\adb.exe shell "echo $EXTERNAL_STORAGE"') do @set STORAGE=%A

Uninstalling existing application. Failures here can almost always be ignored.

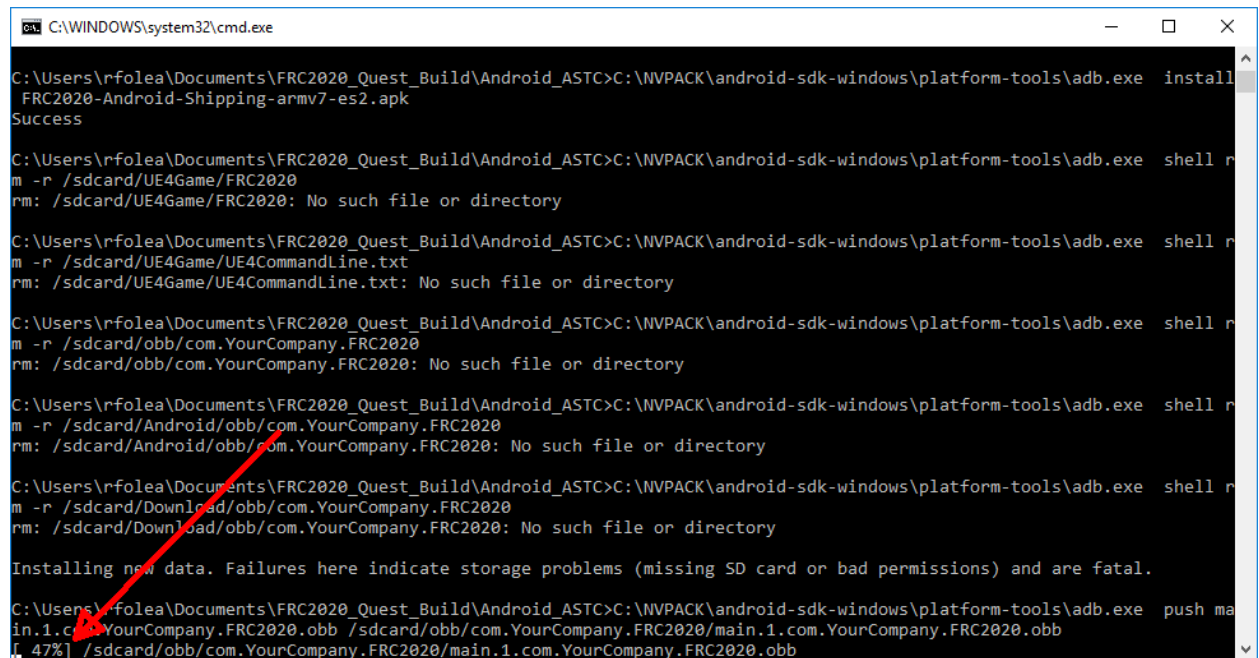
C:\Users\rfolea\Documents\FRC2020_Quest_Build\Android_ASTC>C:\NVPACK\android-sdk-windows\platform-tools\adb.exe uninstall com.YourCompany.FRC2020

Exception occurred while dumping:
java.lang.IllegalArgumentException: Unknown package: com.YourCompany.FRC2020
    at com.android.server.pm.Settings.isOrphaned(Settings.java:4134)
    at com.android.server.pm.PackageManagerService.isOrphaned(PackageManagerService.java:18450)
    at com.android.server.pm.PackageManagerService.deletePackage(PackageManagerService.java:15855)
    at com.android.server.pm.PackageInstallerService.uninstall(PackageInstallerService.java:902)
    at com.android.server.pm.PackageManagerShellCommand.runUninstall(PackageManagerShellCommand.java:792)
    at com.android.server.pm.PackageManagerShellCommand.onCommand(PackageManagerShellCommand.java:118)
    at android.os.ShellCommand.exec(ShellCommand.java:94)
    at com.android.server.pm.PackageManagerService.onShellCommand(PackageManagerService.java:18710)
    at android.os.Binder.shellCommand(Binder.java:468)
    at android.os.Binder.onTransact(Binder.java:367)
    at android.content.pm.IPackageManager$Stub.onTransact(IPackageManager.java:2399)
    at com.android.server.pm.PackageManagerService.onTransact(PackageManagerService.java:3160)
    at android.os.Binder.execTransact(Binder.java:565)

Installing existing application. Failures here indicate a problem with the device (connection or storage permissions) and are fatal.

C:\Users\rfolea\Documents\FRC2020_Quest_Build\Android_ASTC>C:\NVPACK\android-sdk-windows\platform-tools\adb.exe install FRC2020-Android-Shipping-armv7-es2.apk
```


Then continue with a progress indication like this:

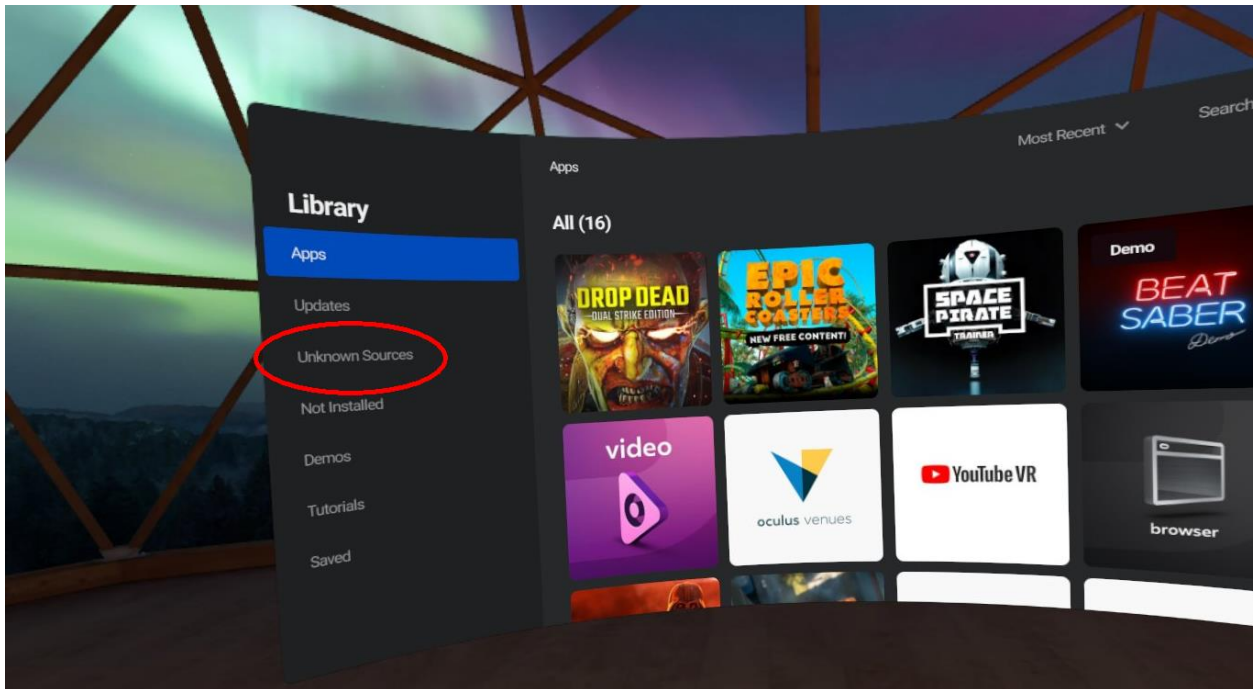


```
C:\WINDOWS\system32\cmd.exe
C:\Users\rfolea\Documents\FRC2020_Quest_Build\Android_ASTC>C:\NVPACK\android-sdk-windows\platform-tools\adb.exe install
FRC2020-Android-Shipping-armv7-es2.apk
Success
C:\Users\rfolea\Documents\FRC2020_Quest_Build\Android_ASTC>C:\NVPACK\android-sdk-windows\platform-tools\adb.exe shell r
m -r /sdcard/UE4Game/FRC2020
rm: /sdcard/UE4Game/FRC2020: No such file or directory
C:\Users\rfolea\Documents\FRC2020_Quest_Build\Android_ASTC>C:\NVPACK\android-sdk-windows\platform-tools\adb.exe shell r
m -r /sdcard/UE4Game/UE4CommandLine.txt
rm: /sdcard/UE4Game/UE4CommandLine.txt: No such file or directory
C:\Users\rfolea\Documents\FRC2020_Quest_Build\Android_ASTC>C:\NVPACK\android-sdk-windows\platform-tools\adb.exe shell r
m -r /sdcard/obb/com.YourCompany.FRC2020
rm: /sdcard/obb/com.YourCompany.FRC2020: No such file or directory
C:\Users\rfolea\Documents\FRC2020_Quest_Build\Android_ASTC>C:\NVPACK\android-sdk-windows\platform-tools\adb.exe shell r
m -r /sdcard/Android/obb/com.YourCompany.FRC2020
rm: /sdcard/Android/obb/com.YourCompany.FRC2020: No such file or directory
C:\Users\rfolea\Documents\FRC2020_Quest_Build\Android_ASTC>C:\NVPACK\android-sdk-windows\platform-tools\adb.exe shell r
m -r /sdcard/Download/obb/com.YourCompany.FRC2020
rm: /sdcard/Download/obb/com.YourCompany.FRC2020: No such file or directory
Installing new data. Failures here indicate storage problems (missing SD card or bad permissions) and are fatal.
C:\Users\rfolea\Documents\FRC2020_Quest_Build\Android_ASTC>C:\NVPACK\android-sdk-windows\platform-tools\adb.exe push ma
in.1.com.YourCompany.FRC2020.obb /sdcard/obb/com.YourCompany.FRC2020/main.1.com.YourCompany.FRC2020.obb
[ 47%] /sdcard/obb/com.YourCompany.FRC2020/main.1.com.YourCompany.FRC2020.obb
```

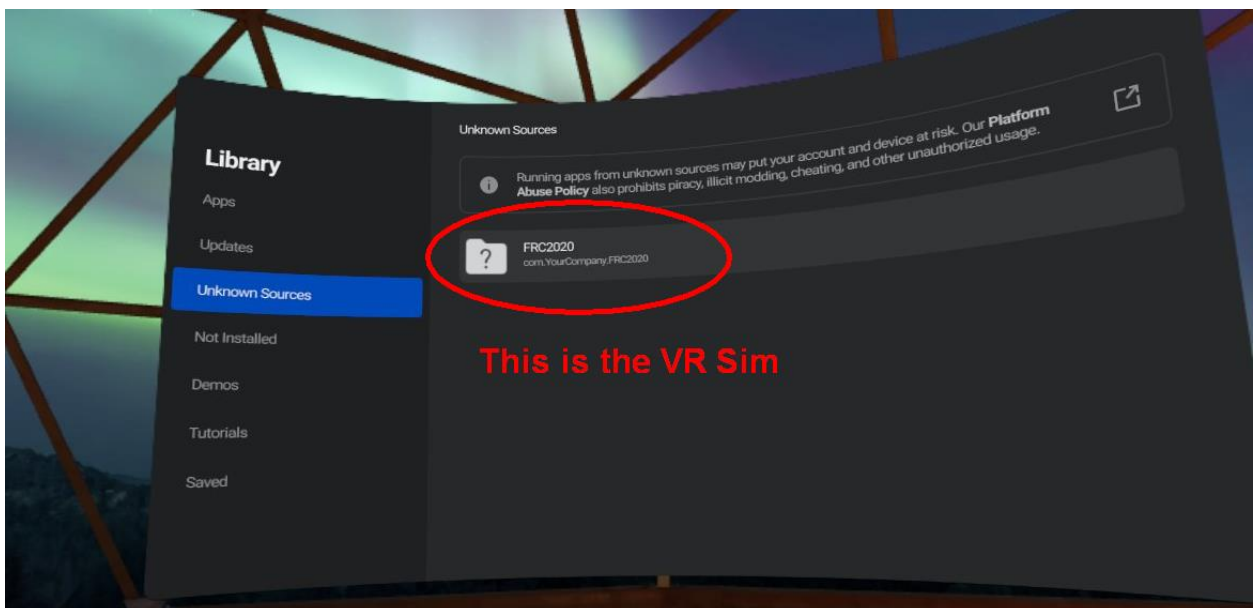
If you get a screen that says press any key to continue, do it.

7. PLAY TIME!

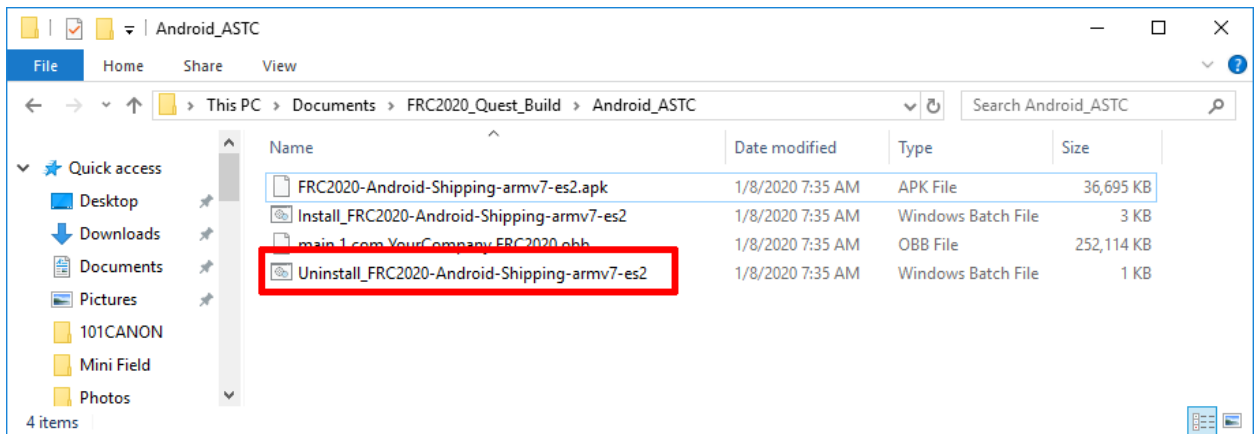
Now you just put on your headset and go to your LIBRARY >> UNKNOWN SOURCES



Where you will find the new app:



8. **SUGGESTION:** Disable Developer Mode (see Step 5) when you are done. You won't be able to transfer photos, etc. between your QUEST and your PC while in developer mode.
9. **To UNINSTALL,** simply run the UNINSTALL routine provided in the download:



Reference: This video : <https://youtu.be/ilcj4HB9LX8> - is basically a video form of the official Oculus Quest starter guide that walks you through everything we just did here.

