

# VR Livestream User Manual

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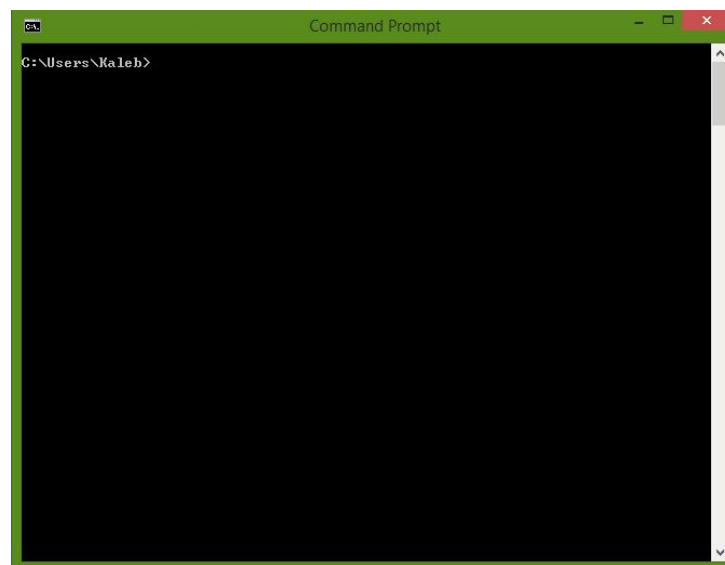
# 1.0. Introduction

This document outlines the steps for how an instructor and their students can set up and use the VR Livestream solution. It is assumed that EML has already integrated the VR Livestream plugin into the desired Unity project and has supplied the instructor with a laptop containing the project.

## 2.0. Instructor Instructions

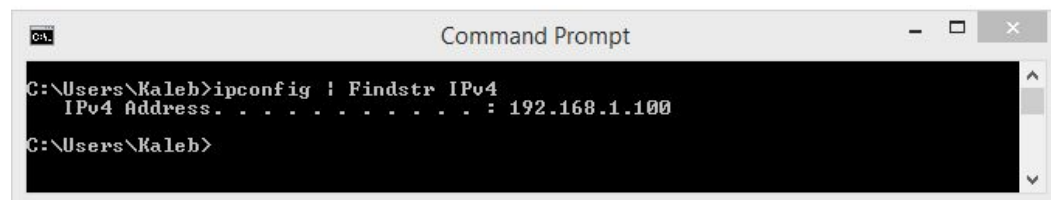
The steps for an instructor are outlined below. Ideally, an EML employee walks the instructor through these steps at least once beforehand.

1. Connect the laptop to the UBC Secure network, or whatever network is available in the classroom being used. It is important that the instructor is connected to the same network as students.
2. Find the local ip address of the computer being used. There are many ways to find this information, and one is presented below:
  - a. Open a command prompt. This can be done by searching for “command prompt”. It should look something like:



- b. The ipconfig command can be used to find network info. Type in “ipconfig” (without the quotes) and hit enter. The computer’s network info should be shown. Look for the IPv4 Address section to see the ip address of the computer. Alternatively, you can filter the results by typing “ipconfig | Findstr IPv4” (without

quotes) and hitting enter. In the results below, my ip address was 192.168.1.100. The ip address should always be in the format of 4 numbers separated by dots.



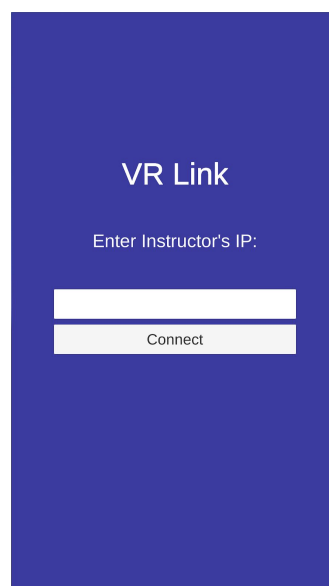
```
C:\Users\Kaleb>ipconfig | findstr IPv4
IPv4 Address. . . . . : 192.168.1.100
C:\Users\Kaleb>
```

3. The instructor should then give this ip address to students.
4. Lastly, the instructor should open the application.

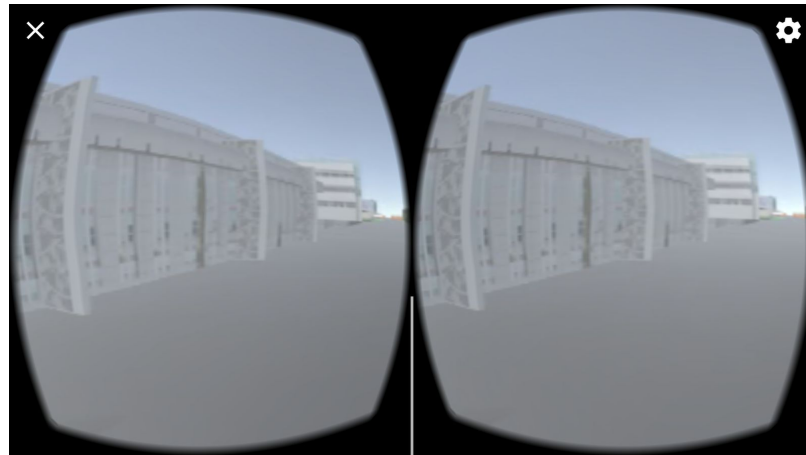
## 3.0. Student Instructions

These instructions assume that students have an Android phone to run the application. EML should also supply students with Google Cardboard headsets to use with the application. At the time of writing, the application is not published on the Google Play Store. However, the current plan is for EML to publish it to the Google Play store, these instructions assume that it has been published.

1. Students should open Google Play, find, and then install the application onto their phones.
2. Students should connect their phone to the UBC secure network or whatever network is available in the classroom they are in. It is necessary that they connect to the same network as the instructor computer.
3. The application should be opened, and students should see the following screen:



4. **After** the instructor has started the application, the student should press on the text box and enter the ip address of the instructor's machine into the text box. They should then press the "Connect" button. The ip address should have been determined by the instructor before they started the application.
5. On success, the student's screen should switch to the Google Cardboard view. It will look similar to the following image:



6. The student should then put their phone in the Google Cardboard headset in order to properly view the VR video.

## 4.0. Troubleshooting

There are no known current issues with the application, but some potential troubleshooting steps are outlined below

### 4.1. Instructor Troubleshooting

In the case that no students are able to connect to the livestream, it is likely that the issue is on the instructor side. Some steps that can be taken by the instructor in this case are:

1. Double check they are on the same network as the students. (eg. UBC Secure)
2. Double check that the ip address they gave to students is correct. In this case, the instructor should redo the step in the instructor instructions for finding the ip address of their computer.
3. Check that Windows Firewall is not blocking the streaming application.
4. If the first 3 steps fail, the instructor should try restarting the application

## **4.2. Student Troubleshooting**

In the case that some students are able to connect to the stream, but one or more students are not, the issue is likely on the student side. In this case, the student that cannot connect can try the following:

1. Make sure they are on the same network as the instructor computer (eg. UBC Secure).
2. Make sure they are entering the correct ip address supplied by the instructor.
3. Restart the application