

Unity for Educators: Meta Quest Deployment Notes

This document is designed to help you get ready to deploy Meta Quest headsets in your classroom.

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Unity®



Quest Deployment Plan

Use this template to draft a plan for how you will deploy Quest headsets in your course/program/class. Add fields and spaces as necessary to customize it to best suit your needs..

Section 1 - Implementation Strategies - Quests

Hardware	Quest Headsets	
	Identification	
	Tracking Users	
	Sanitation	
	Glasses	
	Storage	
	Link Cable	

Software	Meta / Oculus Software Information	
	Meta Account	
	Oculus Developer Account	
	Meta Quest Companion App for mobile device	
	Oculus App (PC only)	
	SideQuest VR (Optional)	

Section 2 - Setting up the Quests

Initial Setup	Set up Meta Accounts and Software
	Create a Meta account for your class. You may use an email address to create this account, or you can link a Facebook or Instagram account. <i>Note: In most K-12 situations, it works best if you create a Meta account</i> <i>specifically for your Quest headsets, rather than students or the teacher tying</i> <i>their personal Meta accounts to a Quest.</i>
	Use that same Meta account to sign up for an Oculus developer account at http://developer.oculus.com/sign-up/
	Install the Meta Quest Companion app (Apple or Google Play Store) to a mobile device (tablet or phone) and sign in using the same Meta account.
	If you are using a PC, install the Oculus App from https://store.facebook.com/quest/setup
Connecting the Quests to the Meta Quest Companion App	Charge the Quest before powering on.
	Follow the instructions on the Quest, including connecting to wifi
	Update the software (requires internet access to Facebook/Oculus/Meta)
	Complete the initial Quest setup and safety training
	The Quest will display a code you can use to connect it to the Meta Quest companion app on your mobile device
	Add Quest to the Meta Quest companion app using the code above

Section 3 - Connecting the Quests to a Computer

Connecting to a PC	Turn the Quest on
	The Oculus App should start. If it does not, you will need to select it from the Windows Start Menu.
	Use the Link cable/Air Link to connect to the PC
	Update the software (requires access to Facebook/Oculus/Meta)
	The first time you start the Oculus app, you will need to log in to your Oculus developer account (requires internet access to Facebook/Meta/Oculus)
	Select the method you will use to connect (Link cable / Wifi Air Link option)
	On the Quest
	Click Always Allow when the USB Debugging dialog appears. (<i>This will prevent this dialog from appearing again on the computer.</i>)
	A dialog to Allow access to data will appear each time you connect. Click Allow .
	Click Enable when asked whether to turn on Oculus Link. If Enable does not appear, you can select it from Settings.
Connecting to	Turn the Quest on
амас	Use the Link cable to connect to the Mac
	On the Quest
	Click Always Allow when the USB Debugging dialog appears. (<i>This will prevent this dialog from appearing again on the computer.</i>)
	A dialog to Allow access to data will appear each time you connect. Click

Allow.



Section 4 - Creating a Unity Project

Which Unity install should I use? What modules do I need?	Install			
	You need at least Unity version 2020.3 to build a VR Project. We recommend 2021.3.7LTS or higher.			
	Recommend locking into one Unity LTS (long term support) version at the beginning of the project. Updating versions after a project starts should be done with caution, as it can introduce issues.			
	Modules			
	Include Android Build Support to build applications Quest:	that will run nativ	vely on the	
	Install Unity 2021.3.7f1 III		×	
	Add modules	Required: 11.95 GB	Available: 416.64 GB	
	▼ DEV TOOLS		SIZE ON DISK	
	Microsoft Visual Studio Community 2019		1.24 GB	
	▼ PLATFORMS		SIZE ON DISK	
	Android Build Support	364.66 MB	1.86 GB	
	L 🔽 OpenJDK	145.91 MB	67.2 MB	
	└── 🗹 Android SDK & NDK Tools	1.35 GB	4.29 GB	
	iOS Build Support	407.64 MB	1.79 GB	
	tvOS Build Support	403.35 MB	1.77 GB	
	Linux Build Support (IL2CPP)	53.73 MB	222.37 MB	
	Linux Build Support (Mono)	53.73 MB	221.83 MB	
	Linux Dedicated Server Build Support	101.5 MB	411.9 MB	
		Bacl	k Continue	

You can choose to include the Windows module if you want to build a Windows project for the PC, since the Quest can run Rift content using the Link cable or Air Link wifi option.



Section 5 - Publishing

-	Sidequest VR
	Allows you to install your application to the Quest
	Application is found under (unknown sources) in Quest app list
	App Lab
	https://developer.oculus.com/blog/how-to-prepare-for-a-successful-app-lab- submission/
	Itch.io
	https://itch.io
	A place to share indie games online.
	You can make an account for free and use the Creator Dashboard to upload content.
	Oculus Developer Hub
	Allows you to manage your Quests
	Allows you to install your application to the Quest
	Application is found under (unknown sources) in Quest app list



Section 6 - FAQ/Troubleshooting

Q: I get this "error OVR88948175" during the Oculus software setup on the PC, is there a fix?



A: This is usually a permissions or access error, meaning the user (student) doesn't have "write-access" to certain folders. The 3 solutions we've found that work best are: Option 1:

- Use admin to uninstall Oculus App
- Download the Windows Oculus App and install as admin (still logged in as student)

Option 2:

- As an admin, run command prompt (click windows icon, type "cmd", right-click Command Prompt > Run as Adminstrator)
- Copy and paste the below command for users who haven't ever logged in to this pc:
 - REG ADD "HKU\.DEFAULT\Software\Oculus VR, LLC\Oculus\Libraries"



- Copy and paste the below command for users that have logged in or are currently logged in:
 - REG ADD "HKCU\Software\Oculus VR, LLC\Oculus\Libraries"

Option 3: Make sure the Quest headset is on, connected to the computer, and initial setup on the headset must be complete. This error can happen if the computer cannot access Oculus.com.

There are log files in the user's APPDATA\Local\Oculus folder. We found the log files had more information to help us troubleshoot the problem.

Q: I forgot to add Android Build Support when I installed my Unity Editor. What can I do to add it?

A: You can add Android Build Support through the Add Modules dialog. There are two ways to access it::

1. Start Unity Hub, click the **Installs** tab, and click the **Gear** icon next to the install you want to add Android Build Support to.



2. Click **Install with Unity Hub** from the Build Settings dialog.





This will bring up the Add Modules dialog where you can select the Android Build Support components.Click **each** one, and click **Install** to add the modules.

Add modules for Unity 2021.3.7f1 LTS		×
Add modules	Required: 0 byte :	Available: 416.64 GB
TEV TOOLS		
rosoft Visual Studio Community 2019		1.24 GB
S Android Build Support	364.66 MB	
🕒 🔽 OpenJDK	145.91 MB	67.2 MB
└─ 🛃 Android SDK & NDK Tools	1.35 GB	4.29 GB
iOS Build Support	407.49 MB	1.79 GB
tvOS Build Support	403.22 MB	
Linux Build Support (IL2CPP)	53.78 MB	222.87 MB
Linux Build Support (Mono)	53.77 MB	222.33 MB
Linux Dedicated Server Build Support	101.57 MB	412.82 MB
		Install

Q. How do I join the Facebook Teach Community?

A. Go to <u>https://www.facebook.com/groups/unityteachcommunity/</u> and click join.

Q. How do I access the Unity Create with VR course?



A. Go to <u>https://learn.unity.com/course/create-with-vr</u> and log in to save your progress.

Q. I missed the unboxing session. Is there any documentation you can point me to?
A. Sure! <u>Here</u> is a slide containing the unboxing information from Meta.

Q. I use SteamVR and after the last update, I am unable to run my Unity projects to the Quest. What's going on?

A. Thanks to Karim Waljee in the Unity Facebook Community: You need to make sure that the SteamVR home toggle is off as shown below:

\equiv STEAMVR 1.22.13 - X	SteamVR Settings			·- 0	×
Tutorial	and the second se				
Media Player	General	Refresh Rate	72 Hz		
Reset Seated Position	Play Area	Render Resolution		Auto	
Display VR View	Dashboard				
Display Performance Graph		Dashboard Position	FAR	~	
Uevices +	Controllers				
Create System Report	Video	Notifications	Off	On	
Settings	Audio	SteamVR Always on Top	Off	On	
Developer >	Startup / Shutdown				
Help	Developer	Pause VR when computer is locked	Off	On	
Quit	Developer	SteamVR Home	Off		
	Advanced Settings Hide Show				

Q. Can I use the charging cable that came with the Quest or Quest2 as my Link cable to stream apps to my device?

A. Unfortunately, no. The charging cables that come with the Quest and Quest 2 are USB 2 cables. A USB 3 cable is required to stream apps (through the Oculus PC app) as well as running apps from Unity to your device.