# CAD/VR to Quest

Learn all the techniques for creating and sharing VR into the Oculus Quest


- Introduction
- Transfer Your 3D/CAD into Oculus Quest
- Create Interactive VR Experiences for the Oculus Quest
- How to Pair your oculus quest with your SimLab Account
- SketchUp to Oculus Quest
- Rhino to Oculus Quest
- Sharing the VR Experience with others
- Enhance The Quality of The VR Experience

# Introduction




In this book we are going to learn all the techniques for sharing 3D/CAD models to Oculus Quest and creating interactive VR Experiences for it.

There are several ways to create and share your own VR Experiences for the Oculus Quest:




## Transfer any **3D/CAD model** to Oculus Quest

This method is fast, reliable, and super easy for sharing models from different file formats to Oculus Quest, We will use SimLab VR Studio to read any 3D/CAD model and in few clicks it can be viewed on Oculus Quest.

**Start Now**




## Create **interactive VR**

## **Experiences** for Oculus Quest

Create all types of 3D VR Experiences without any coding. create VR visualization, interactive VR Experiences, VR training series and much more...

**Start Now**

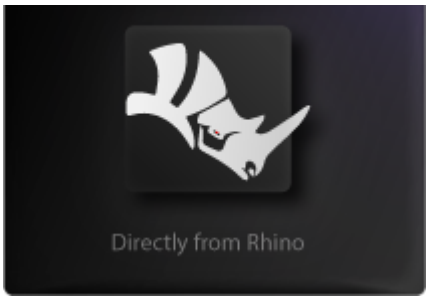



## Share models directly from

## **SketchUp** into Oculus Quest

One click to share any SketchUp scene into the Oculus Quest directly.

**Start Now**




## Share models directly from **Rhino** into Oculus Quest

One click to share any Rhino scene into the Oculus Quest directly.

**Start Now**



## Share Your VR Experiences **with others**

You can use SimLab VR Viewer to share your scenes with your colleagues, clients, and others

**Start Now**

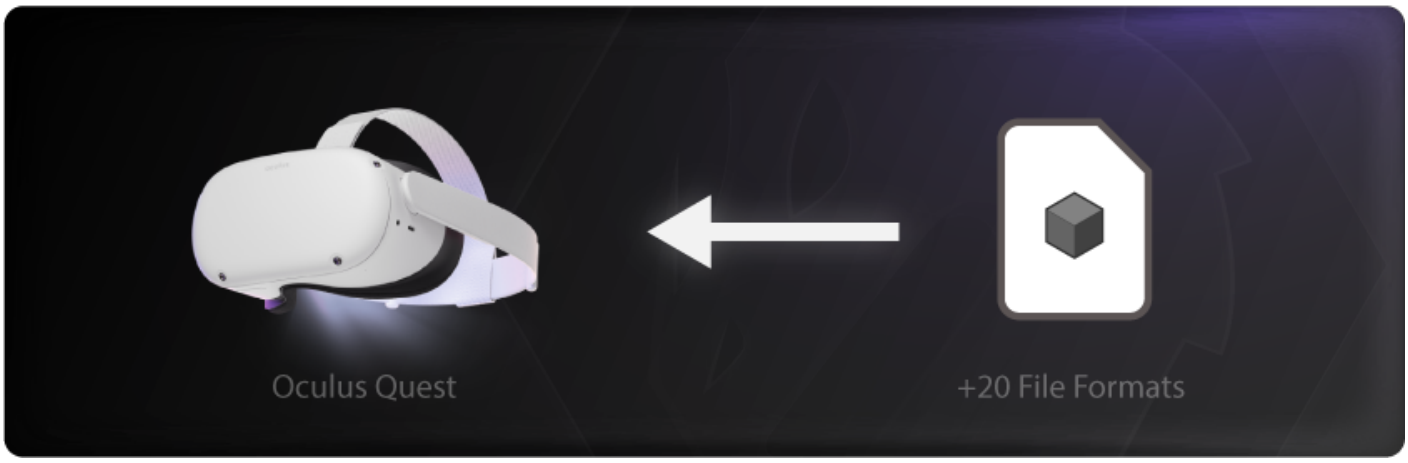


# **Enhance** the Quality of Your VR Experiences

Different settings and features are available to enhance the quality and the performance of your VR Experiences.

**Start Now**

# Transfer Your 3D/CAD into Oculus Quest



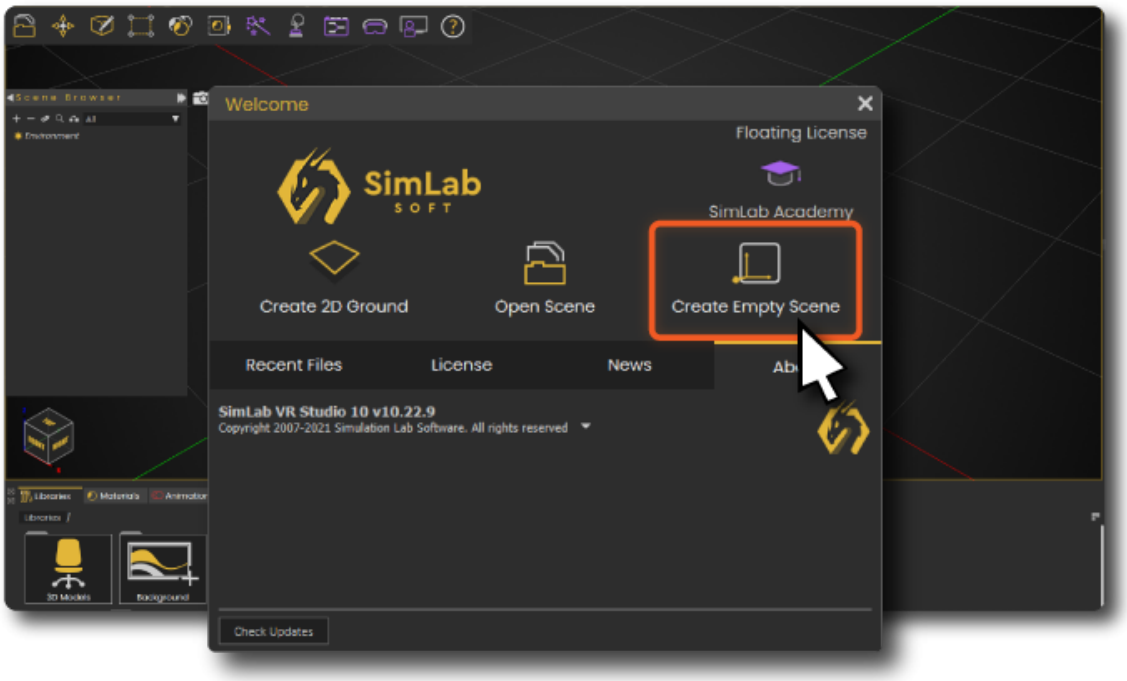

If you have a 3D model, a 3D scene, or a CAD design and want to run it and examine it on VR, you can easily transfer it and run it on Oculus Quest using SimLab Soft technology.

Follow these steps to transfer any 3D file you have to your Oculus Quest:

> The 3D model used in this example can be found here. **Download Link**

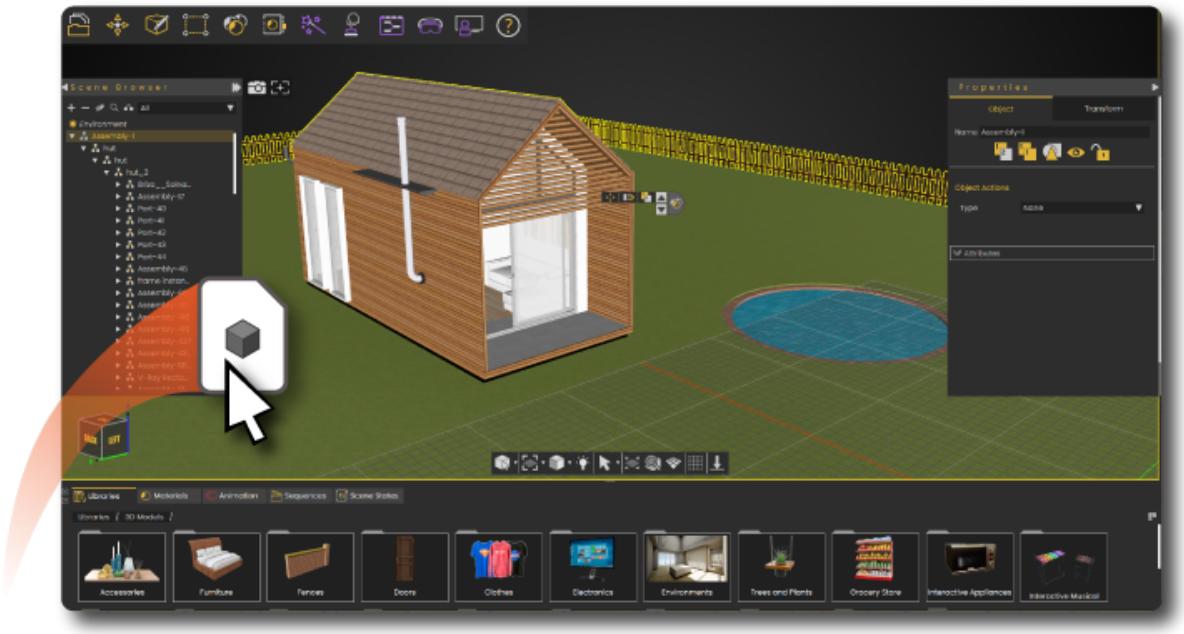
## First: Go to your desktop (windows or macOS).

**1-** Download and Install **SimLab VR Studio**, then open it.



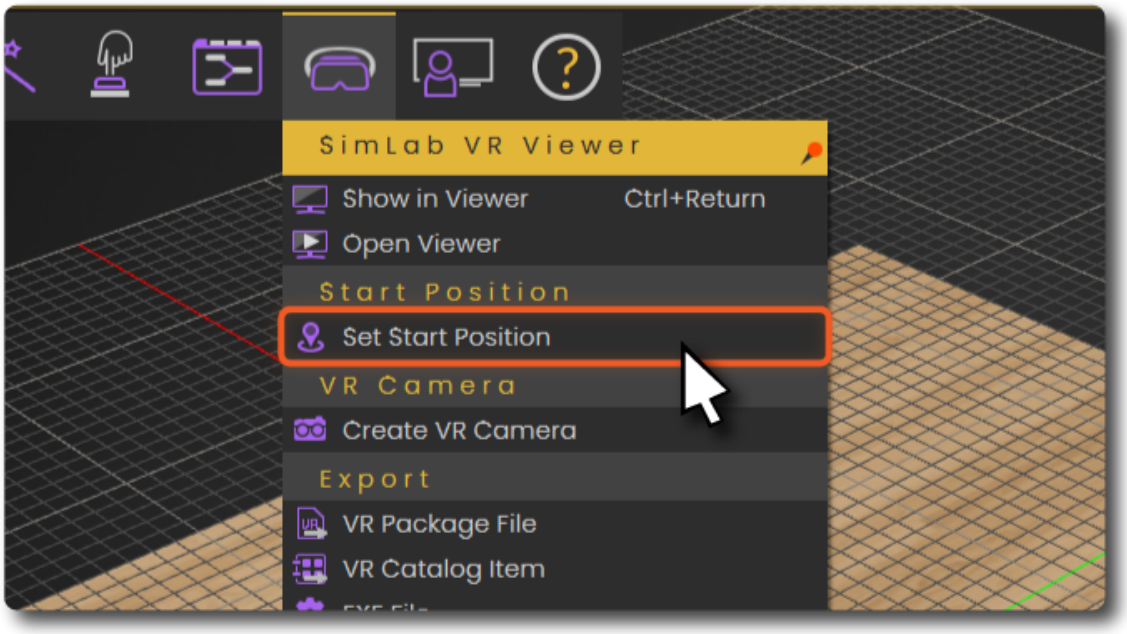

**2-** Drag and drop your 3D/CAD model(s) into the scene.

You can import pretty much all industry standards 3D/CAD file formats, check the full supported file formats list **here**.



**3-** Define the starting position of the VR Experience.

The start position defines the location where the viewer is going to start the experience, you can position it wherever you want.

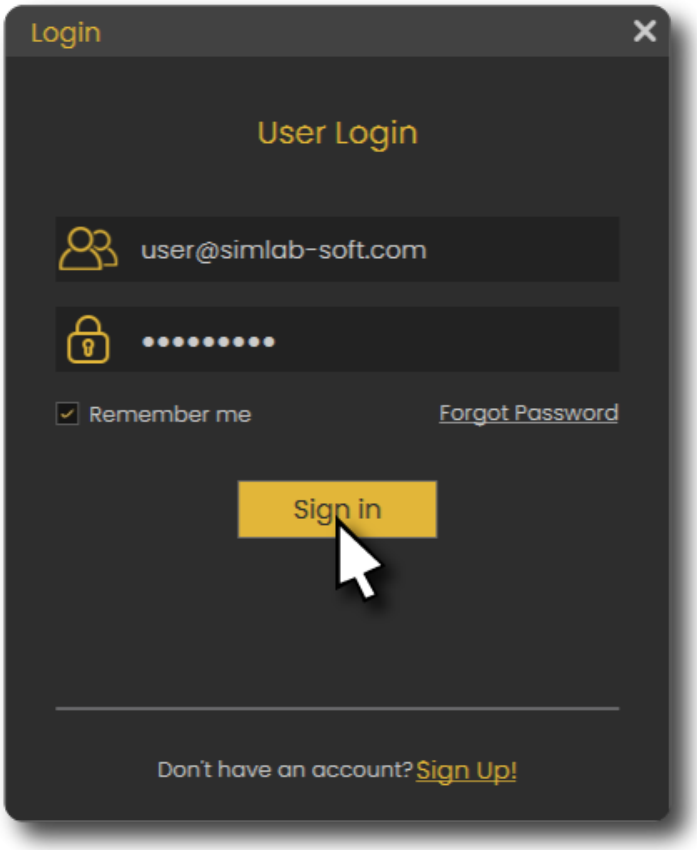



> You can test the VR scene before sharing it to the oculus quest on desktop.
> Go to **VR Viewer > Show in Viewer > Desktop**.

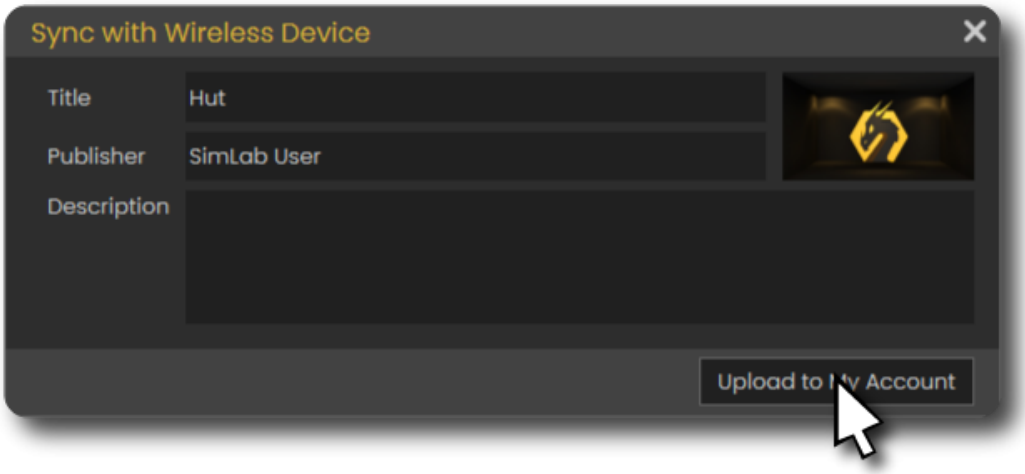
**4-** Share the VR Experience to SimLab Cloud, go to **VR Viewer > Show in Viewer > Standalone VR**.



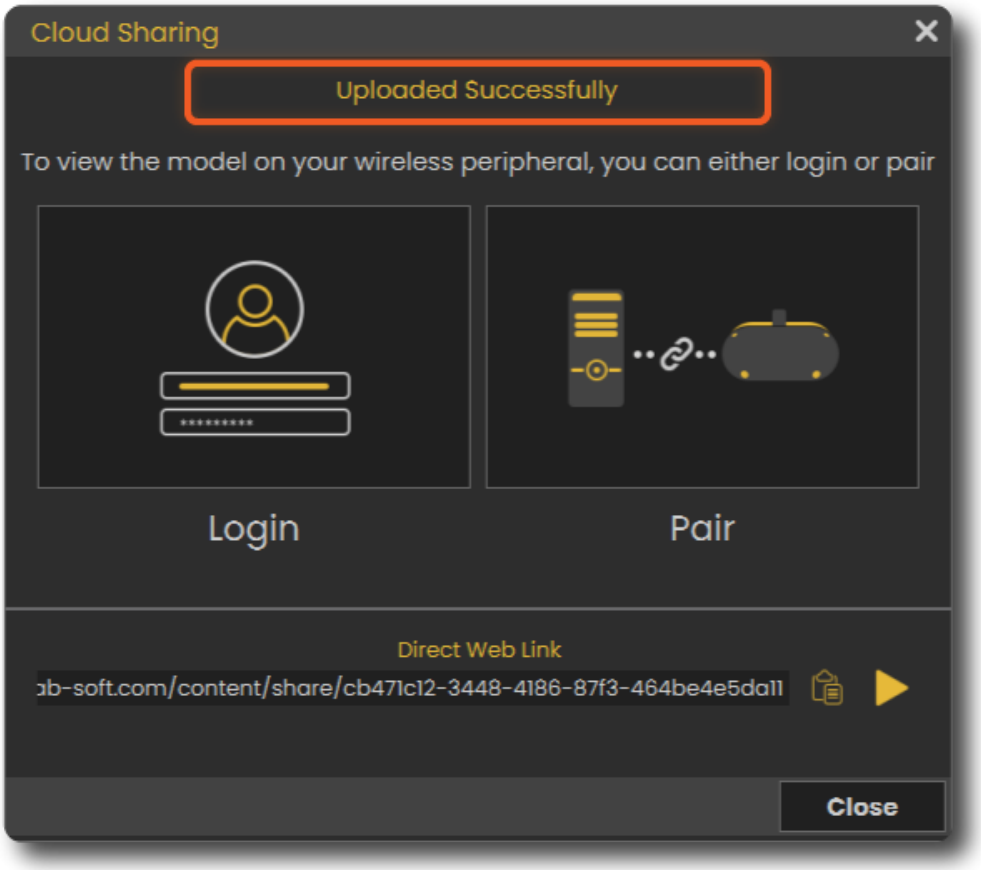
You need to **sign in** to an active SimLab account if you are not already.




Fill out the information then click on **Upload to My Account.**




It will take few moments then it should say that its **Uploaded Successfully.**




You can learn how to enhance the quality by enabling shadows on the Oculus quest **here**.

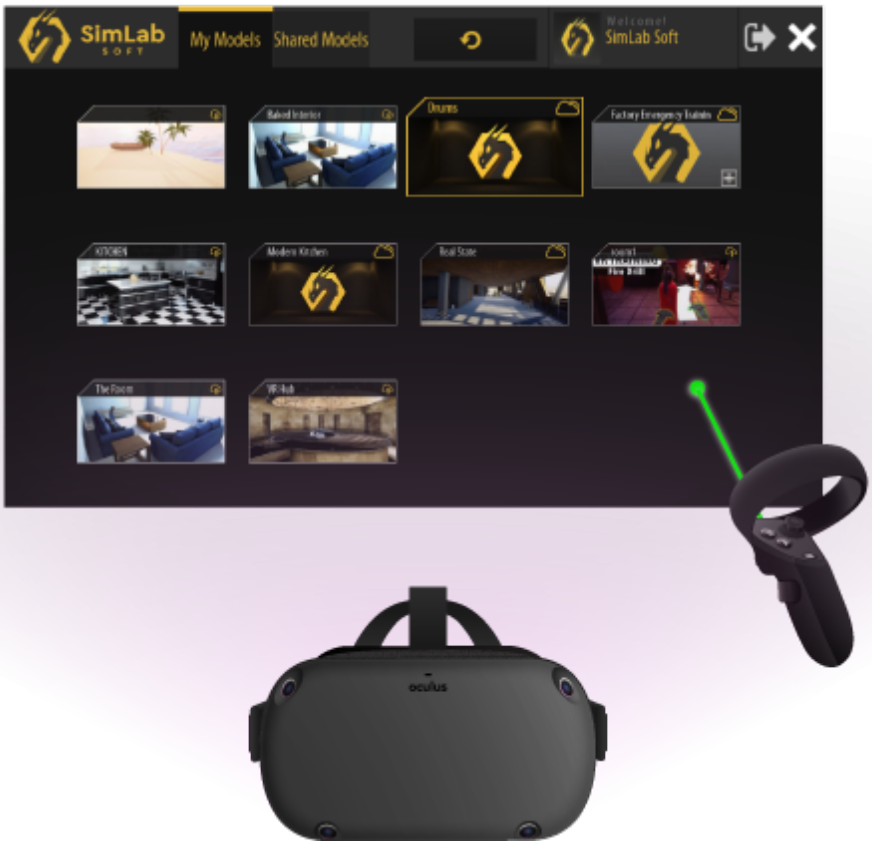
## Second: Go to your Oculus Quest device.

Now the VR scene is uploaded and synced on your SimLab account, all you have to do is to open your account on the oculus quest and you will be able to access the VR Experience.

**1- Download** SimLab VR Viewer for Oculus Quest.

**2-** Open the app, then **sign in** to your SimLab account.

**3-** You will find the VR Experience under **My Models** tab.


SimLab
SOFT
My Models
Shared Models
Welcome!
SimLab Soft
Drums
Factory Emergency Training
Modern Kitchen
Real State
oculus

# Create Interactive VR Experiences for the Oculus Quest




Other than just sharing your models as they are to the oculus quest to view them, you can do more by creating interactive VR Experiences, quizzes and training sessions easily with SimLab VR Studio.

## Learn how to create interactive VR Experiences using SimLab VR Studio from here:

**> Creating your first VR Experience, Step by Step**

## Then you can share any scene you create with SimLab VR Studio following these steps:

**> Share the VR experience to SimLab Cloud.**

# How to Pair your oculus quest with your SimLab Account

Oculus Quest can be paired to a SimLab account so it becomes so easy to transfer and sync VR models to them, after pairing all of the uploads and modifications on SimLab cloud will be automatically be synced and transferred to all of your paired devices.

## Pairing Steps

1. Open **SimLab VR Viewer** on your desktop (windows or macOS) then **sign in to** your SimLab account.



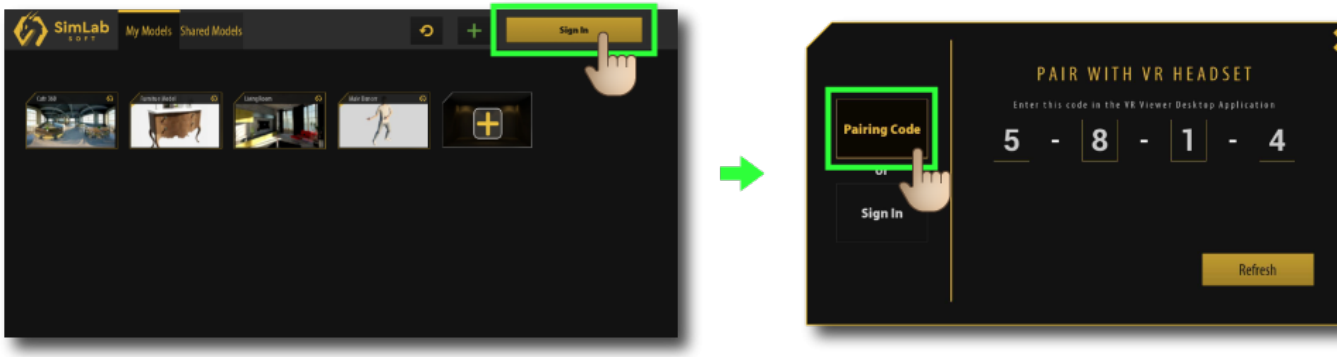
2. Click on the **Pairing Button** to open the pairing dialog.



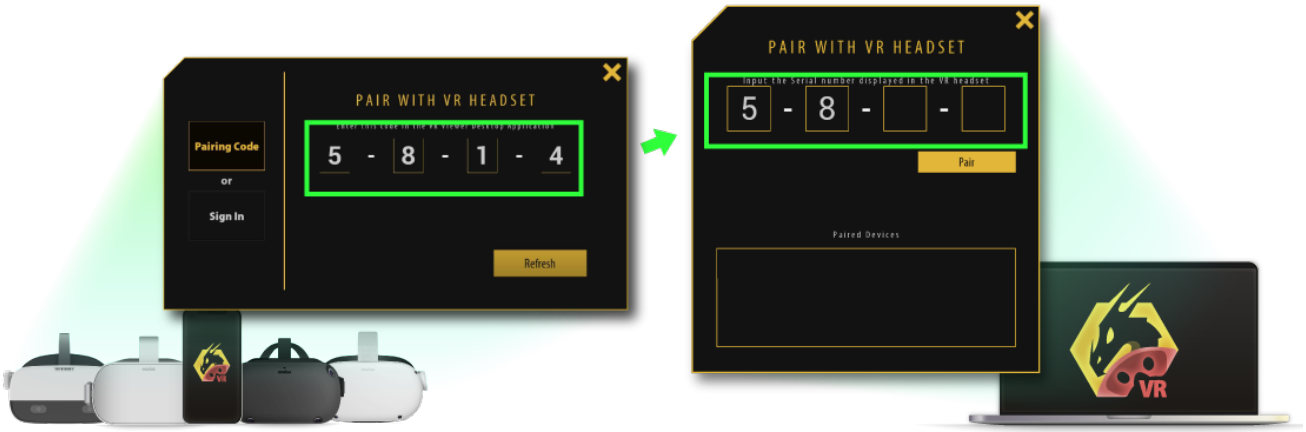

3. Open **SimLab VR Viewer** on your Oculus Quest device.



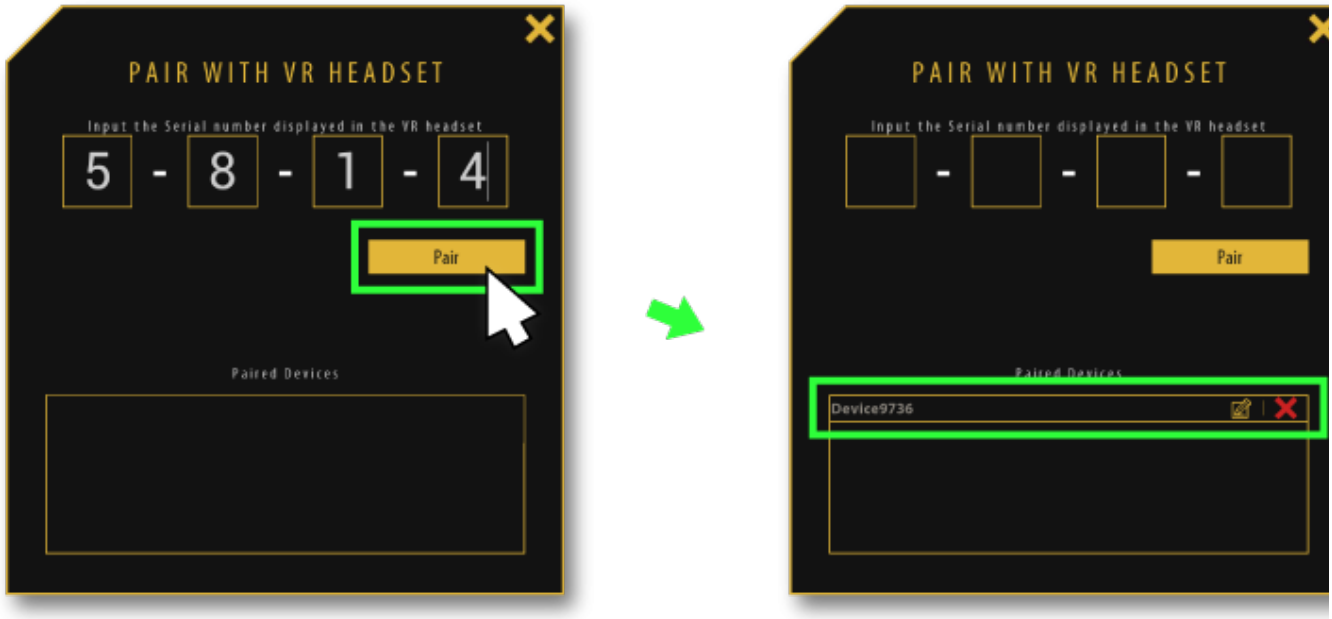
4. Click **sign in** button and choose pairing. (or you can sign in normally to your account and skip all the following steps)



5. Insert the **pairing code** that shows on your device into your PC.



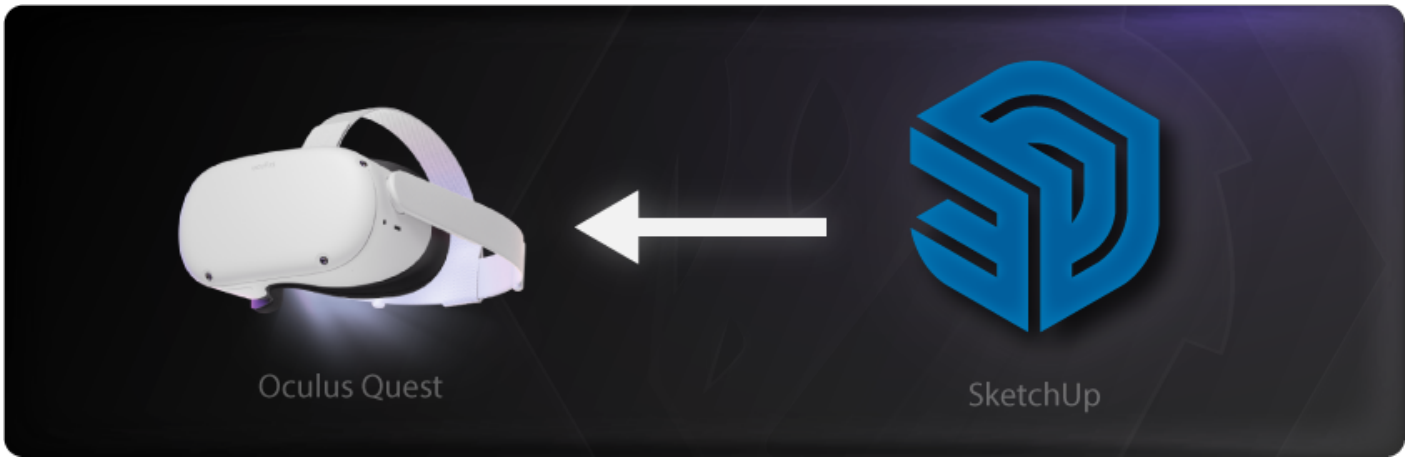

6. Click pair, then the device should appear on the pairing devices list, you can rename it or delete it from this list as well.




7. After that, click refresh button on your device, then all of the uploaded models will be loaded.



# SketchUp to Oculus Quest




In the following steps we are going to learn how to share our designs directly from SketchUp into Oculus Quest device.

We are going to use **SimLab VR Plugin for SketchUp** to do that.

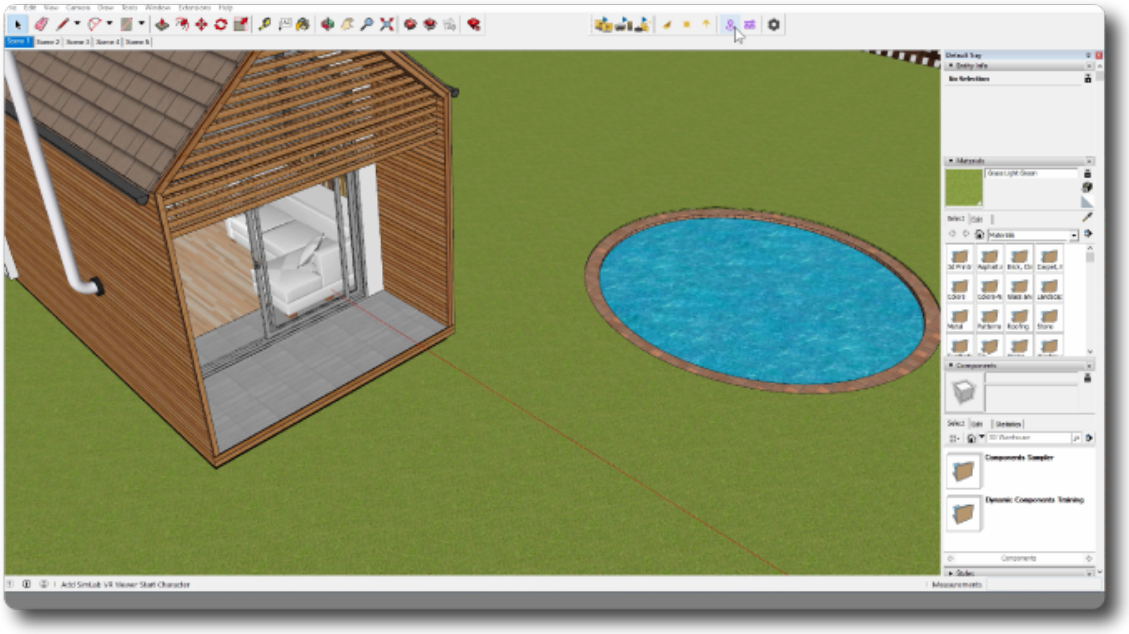
## Download and setup the Extension

1. Go to **SimLab VR Plugin for SketchUp**, then download the plugin on your desktop (windows or macOS).
2. Open SketchUp.
3. Activate the plugin Toolbar by going to **Extensions > SimLab VR Plugin > Show Toolbar.**



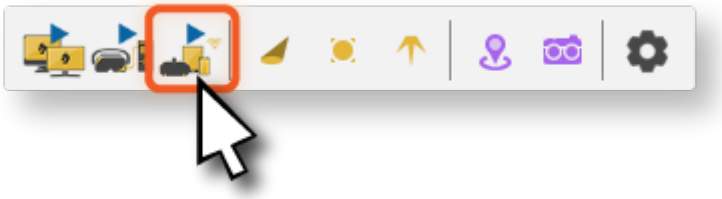
## Sharing Models

1. Open your model on SketchUp.

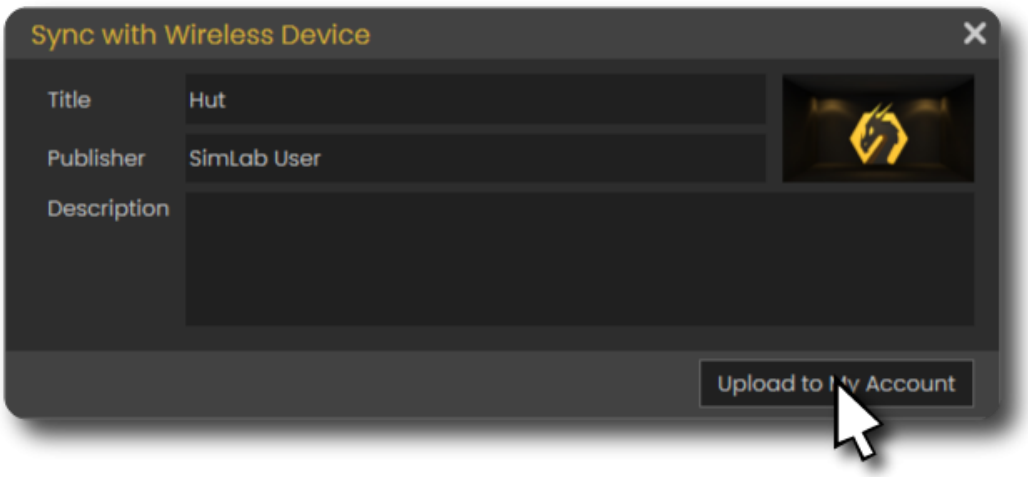


> The 3D model used in this example can be found here. **Download Link**

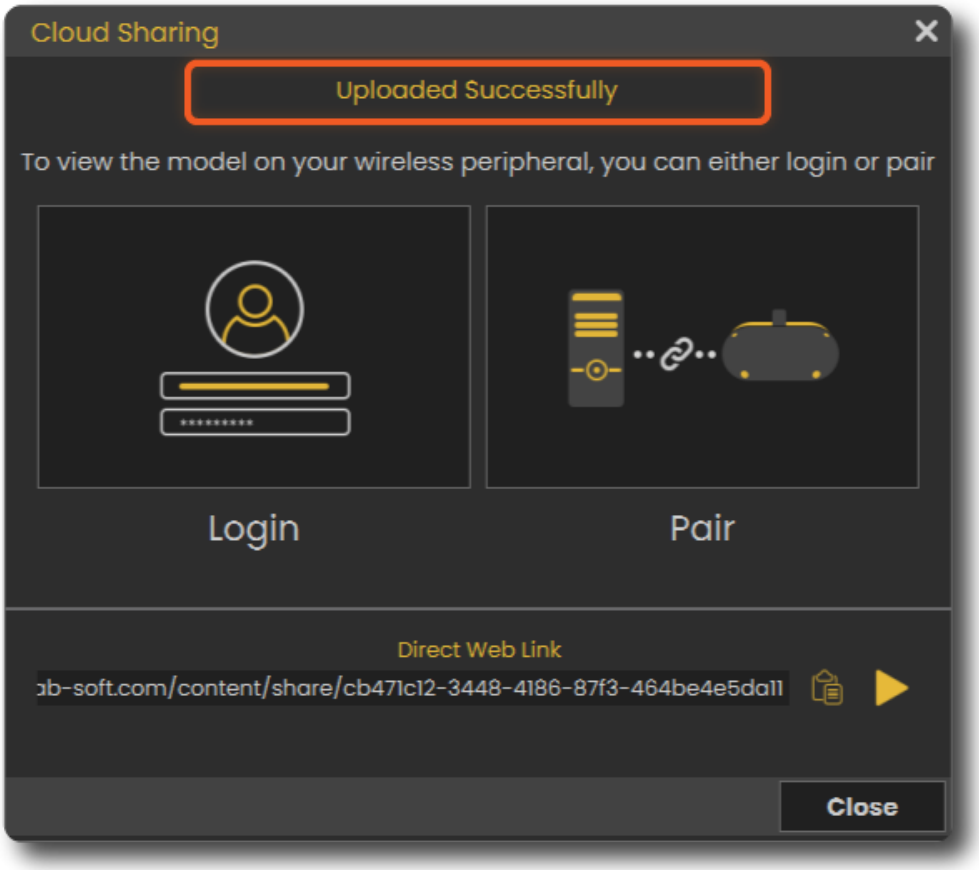
2. Click on Sync with Wireless Device.



3. Fill out the information then click on **Upload to My Account.**




It will take few moments then it should say that its **Uploaded Successfully.**

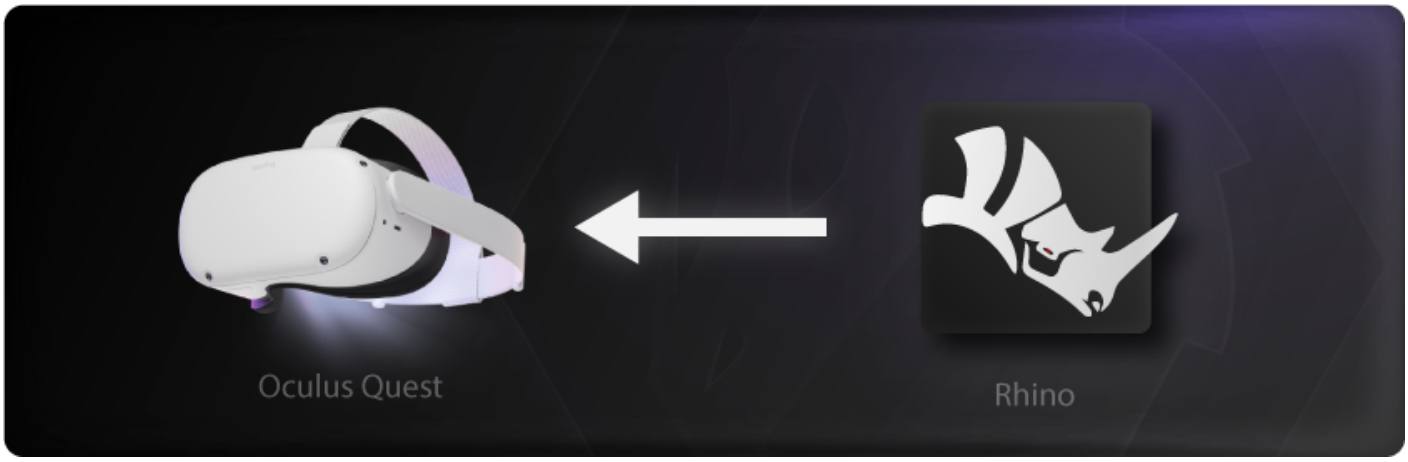



# Advanced VR Creation

If you want to create interactive VR Experiences with better environments, visual effects, use different 3D file types, create training sessions, quizzes and more. You can use SimLab VR Studio, **Learn more**.

You can learn how to enhance the quality by enabling shadows on the Oculus quest **here.**

# Rhino to Oculus Quest




In the following steps we are going to learn how to share our designs directly from Rhino into Oculus Quest device.

We are going to use **SimLab VR Plugin for Rhino** to do that.

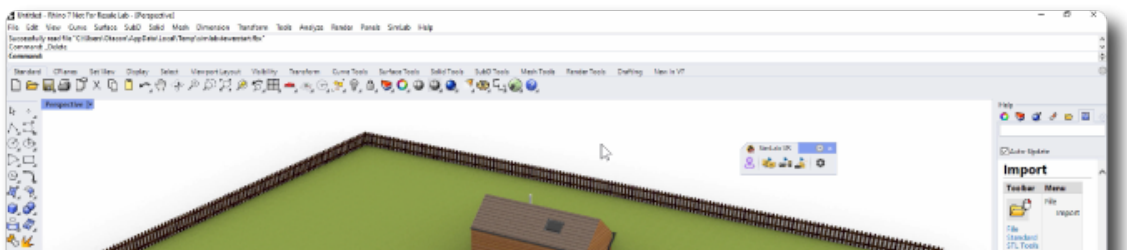
## Download and setup the Extension

1. Go to **SimLab VR Plugin for Rhino**, then download the plugin on your desktop (windows or macOS).
2. Open Rhino.
3. On the ribbon then **Right Click > Show Toolbar > SimLab VR.**



## Sharing Models

1. Open your model on Rhino.

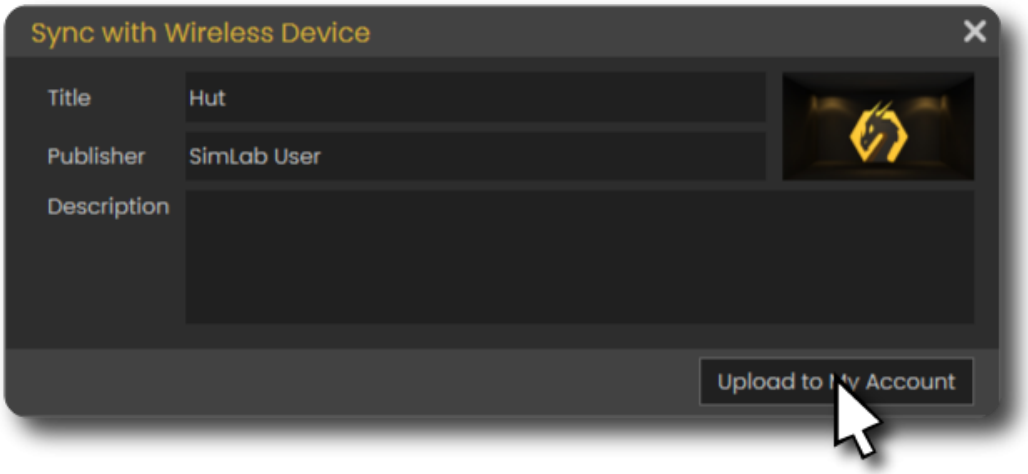


> The 3D model used in this example can be found here. **Download Link**

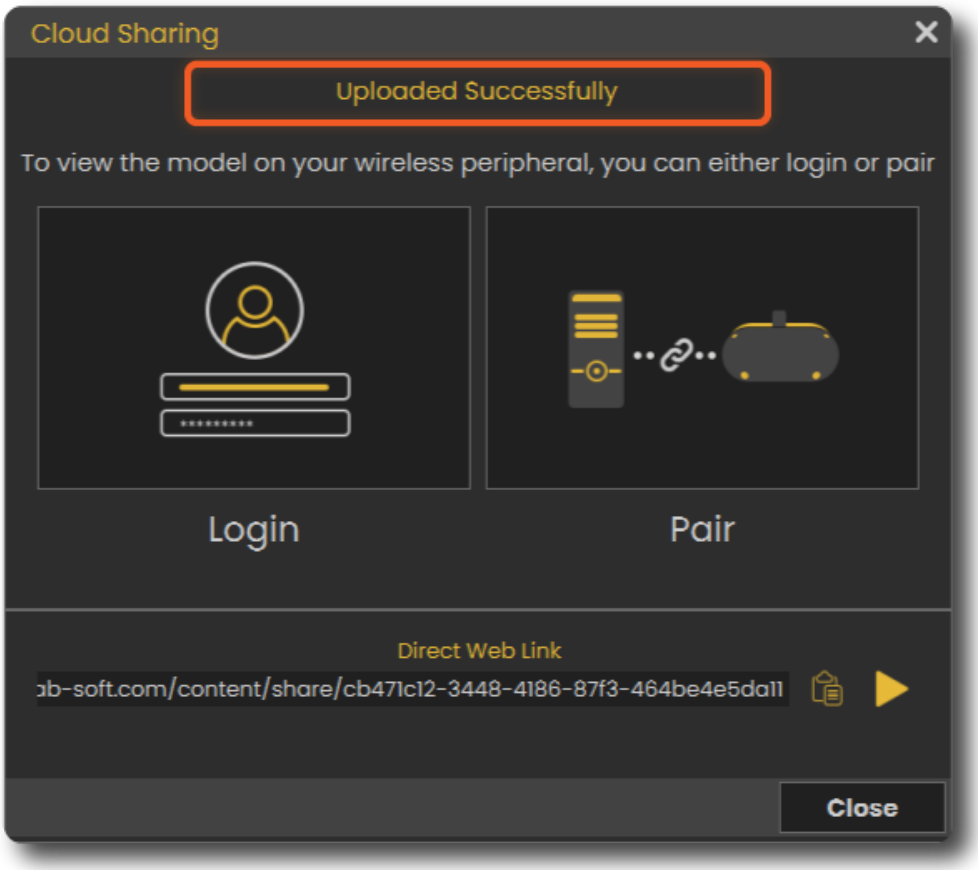
2. Click on Sync with Wireless Device.



3. Fill out the information then click on **Upload to My Account.**




It will take few moments then it should say that its **Uploaded Successfully.**



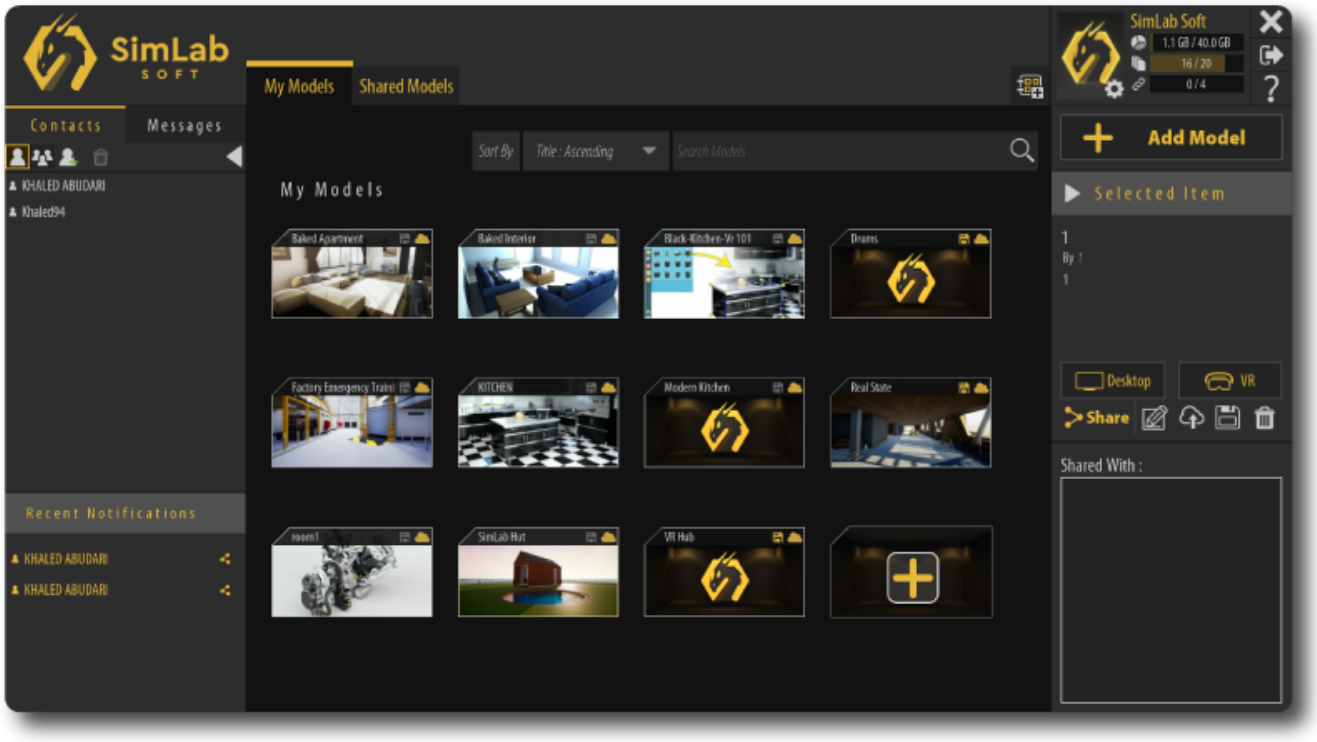
# Advanced VR Creation

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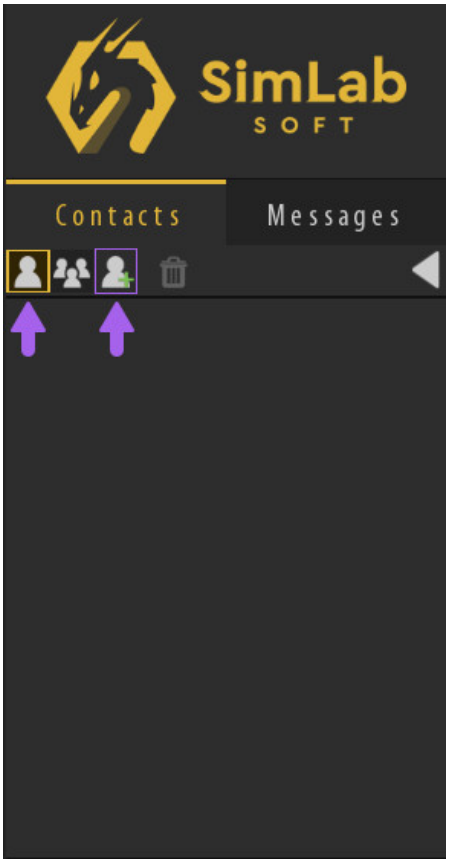
# Sharing the VR Experience with others

In order to manage your VR Experiences, add contacts, contact them and share your VR Experiences, you need to use the desktop version (windows and macOS) of SimLab VR Viewer.




To Share VR Experiences with others through SimLab VR Viewer you need to first add them as contacts.

## Adding Contacts

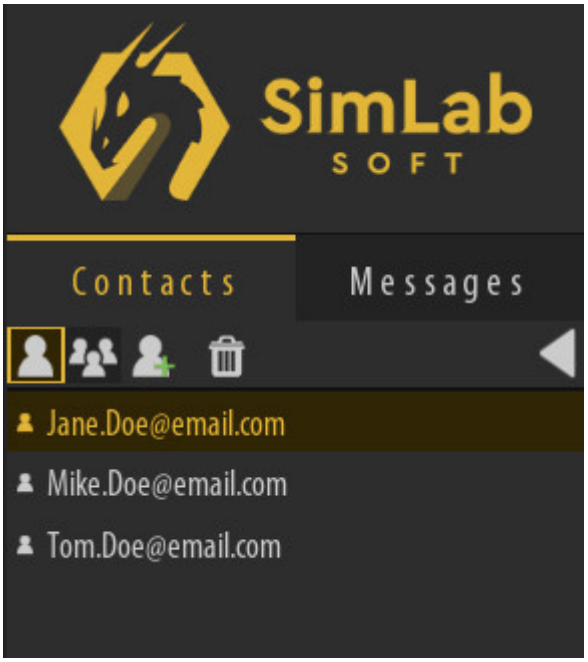



To Add Contacts, in the Contacts panel to the left make sure that the **Contacts List** is toggled on, then click on the **"Add Contact"** Icon.




In the "Add Contact" dialogue, type the email address of the user you want to add as a contact to your list, then click on the Add button.

Note : You can add multiple contacts at the same time by separating their email addresses with a **"comma"** in the email field.




Added contacts will be displayed in the "Contacts" list as email addresses if they do not have an active SimLab Account.

Once they activate their account, their names will be displayed instead of email addresses.

Note : An email will automatically be sent to the contacts you add, inviting them to activate their SimLab cloud account in case they do not have an existing account.

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## Creating Groups

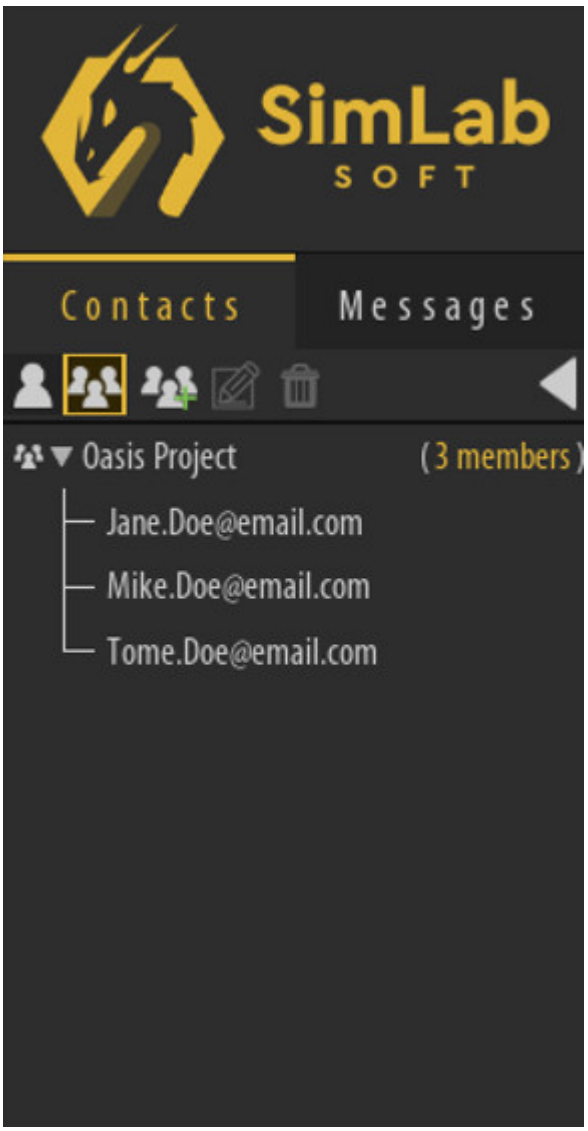
To manage contacts more efficiently, you can assign them to groups in order to easily share VR Experiences with them.




To create a **Group**, in the **Contacts** panel to the left make sure that the **Groups List** is toggled on, then click on the **"Add Group"** Icon.




In the **Add Group** dialogue, type in a name for the group then select the contacts that wish to add to that group.


SimLab
SOFT
Contacts
Messages
Oasis Project
(3 members)
Jane.Doe@email.com
Mike.Doe@email.com
Tome.Doe@email.com

Once the group is created, you will find it when toggling the Groups list view in the contacts panel.




## Adding Multiple Users to a Group

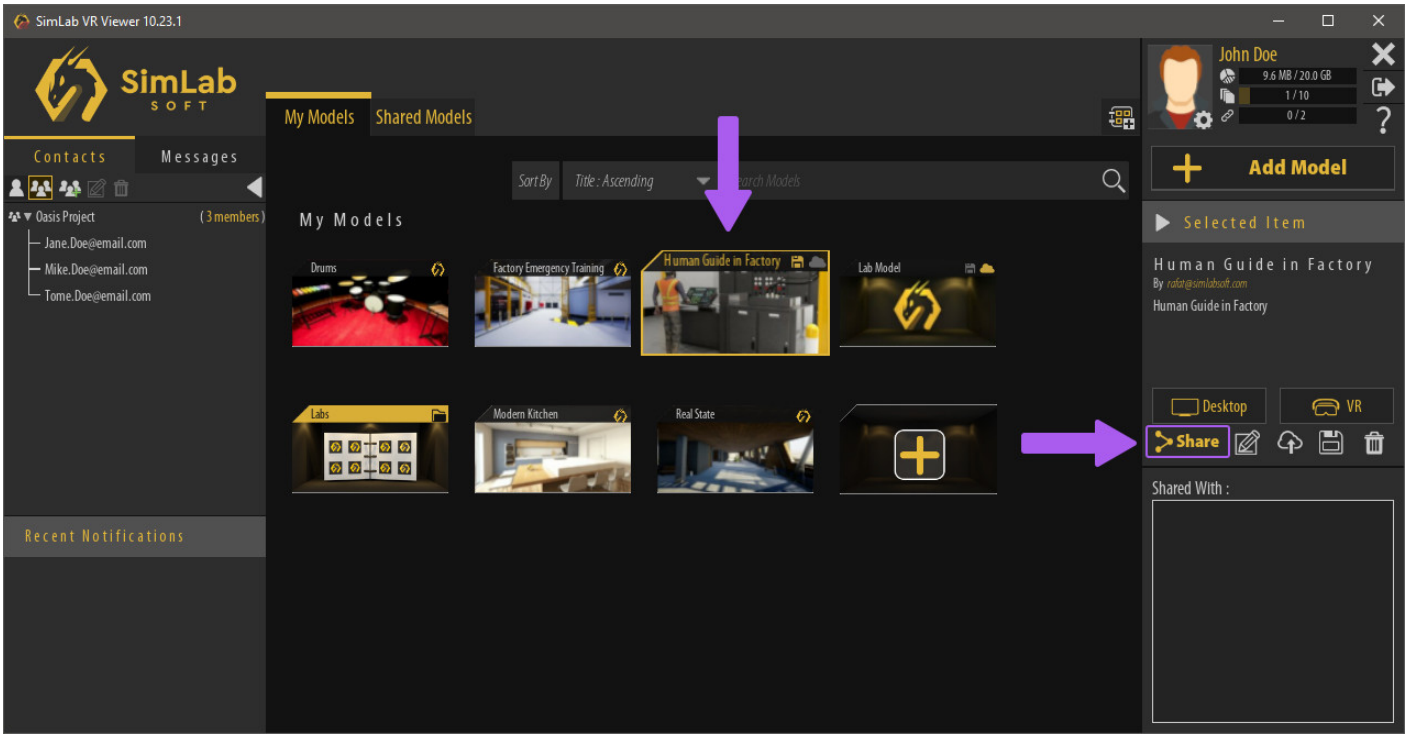
After creating a group you will be able to add multiple contacts to that group, to do so, toggle on the **Contacts List** then click on the **Add Contacts** icon.

In the **Add Contacts** dialogue, enable the **"Add to Group"** option and select the desired group, and in the email field, type or paste the email addresses separated by a "**Comma**", then click **Add**.

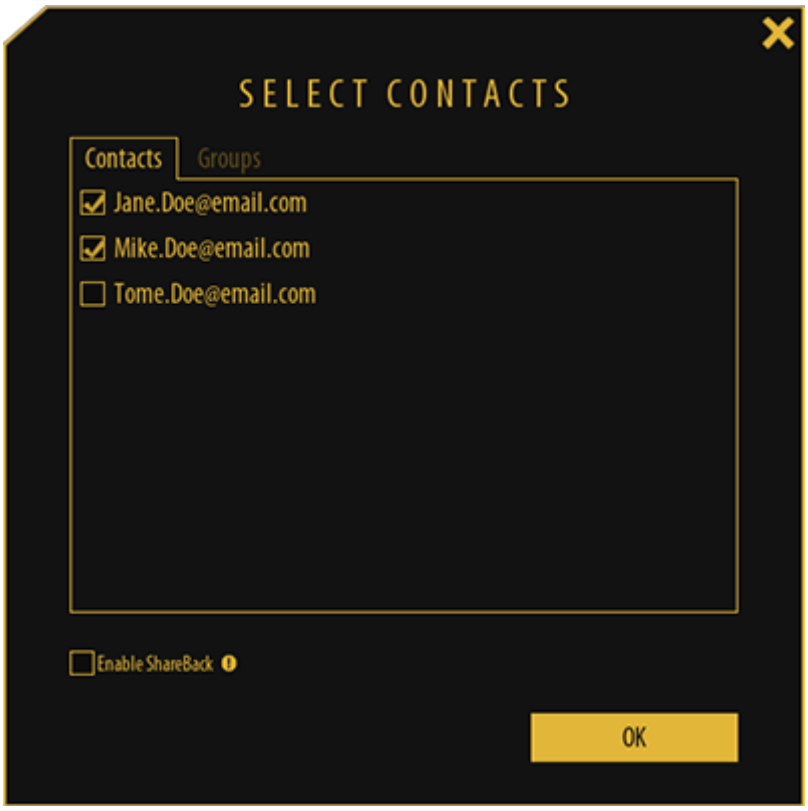
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# Sharing VR Experiences

Now that you have learned how to add contacts and groups, you can now Share VR Experiences with other users.



To Share a VR Experience, select it, then from the "Selected Item" Panel to the right, Click **Share**.

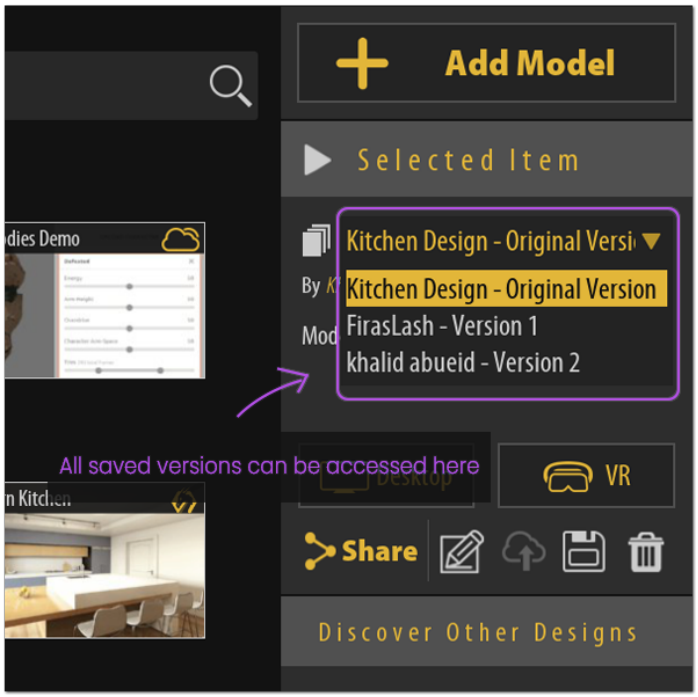



From The Share Dialog, you can either select to share the VR experience with users from the contacts list, or share it with groups by switching to the groups and selecting a group.

Click **OK** to Share the VR Experience.

## ShareBack

The ShareBack option, when enabled, allows the user that you shared the VR experience with to send back the VR experience to you with any modifications or notes that have implemented to the VR Experience.




The Shared back VR Experience will appear to you as an additional version of the VR Experience and it wont affect the original Shared VR Experience.

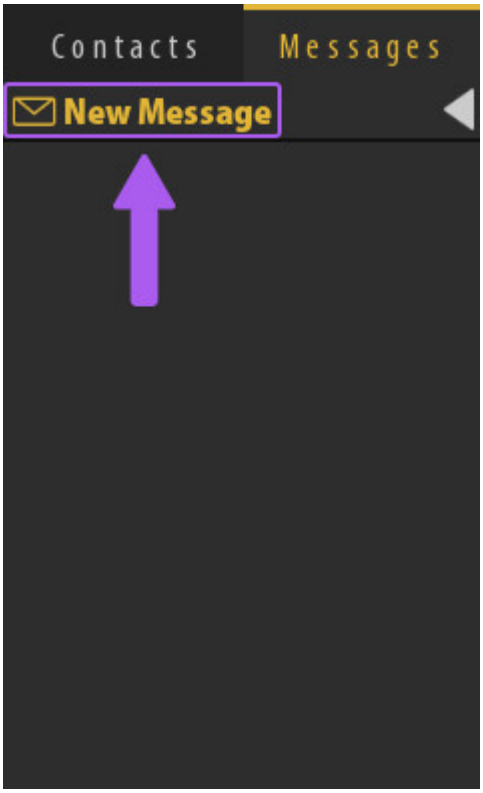
https://www.youtube.com/embed/A3ToDyr6O7w?ab_channel=SimLabSoft

Watch This Video To learn more About Sharing and using ShareBack.

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# Messages

SimLab VR Viewer allows you to send and receive messages from contacts through the **Messages** Tab in the panel to the left.



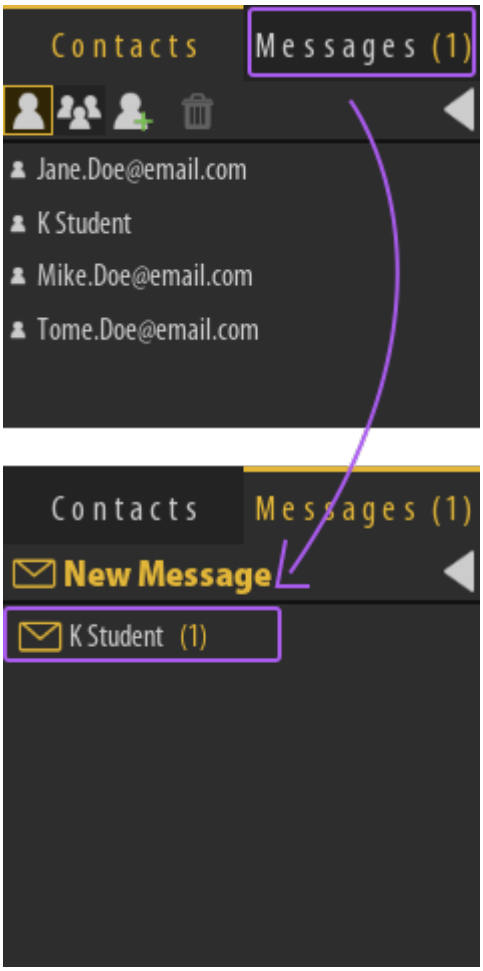
To send a message, Switch to the messages Tab and Click on **"New Message".**




From **Select Contacts** dialog, select the contacts you wish to send a message to, and click "OK".


Contacts
Messages
K Student
22 Jan, 2022
What are you notes on the design I sent you?
Type Message Here

Once you have selected a contact, you can now message him by typing in the text field at the bottom then click "**Send**" or by pressing "**Enter**" on the keyboard.



When you receive a message a notifications with the number of received messages will appear next to the **Messages** tab title.

Switch to the messages tab and you will find the active messaging sessions with the number of messages next to it, click it to view the received messages

# Enhance The Quality of The VR Experience

There are various ways to enhance VR Experience quality and performance. Here are some of them:

## Optimizing VR Packages

You can just tick this option in the VR settings and the Geometry of the scene will be enhanced upon export very efficiently giving much smoother and lighter experience without loosing any of the details.

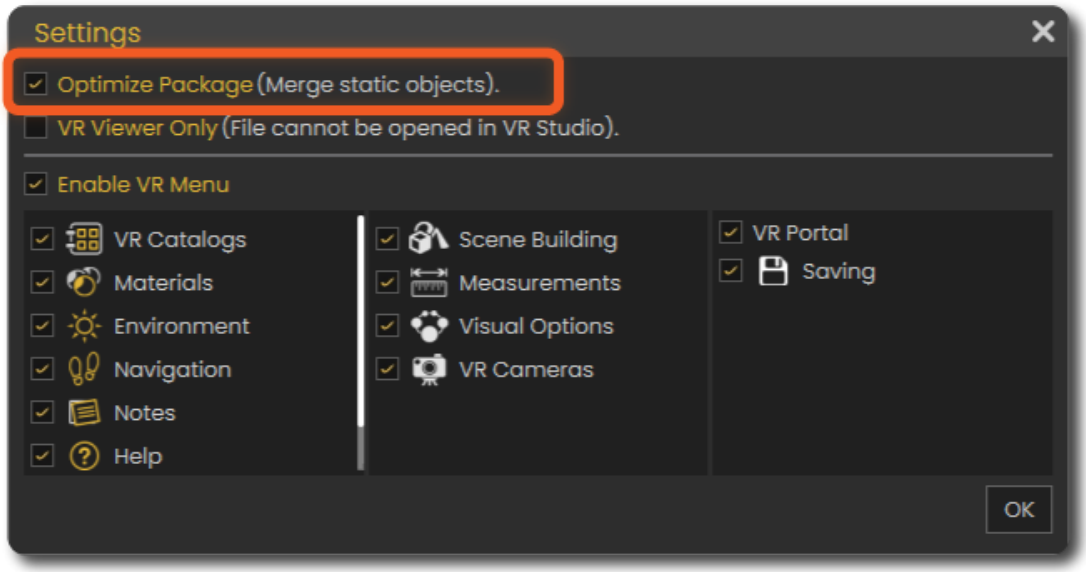
This option is available in both **SimLab VR Studio** and **SimLab VR Plugins for SketchUp and Rhino**.

### SimLab VR Studio

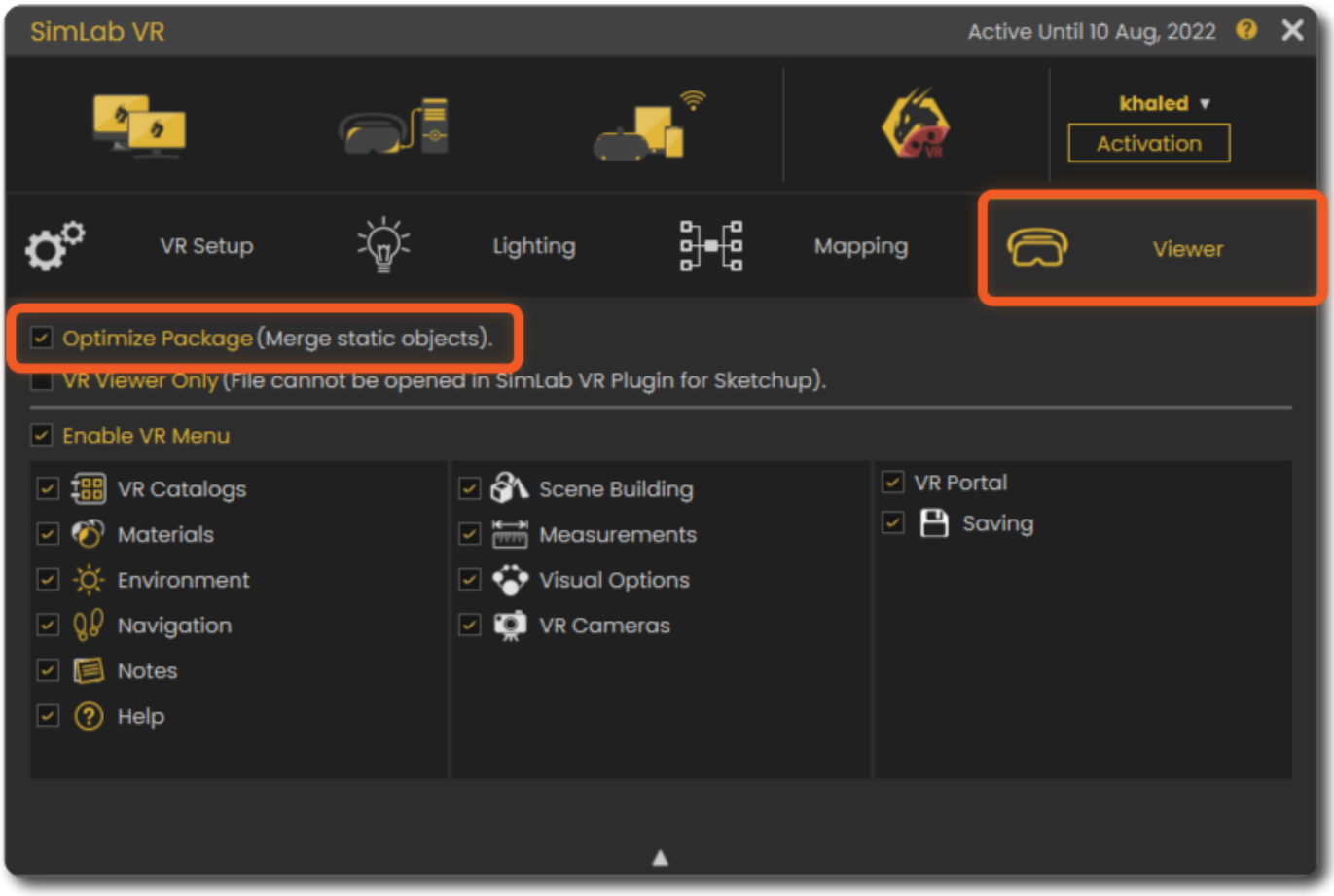
- Go to **VR Viewer > Show in Viewer > Settings**




- Check **Optimize Package.**




## SimLab VR Plugins for SketchUp and Rhino




# Scene Optimization

This option is available in **SimLab VR Studio** under the file menu.

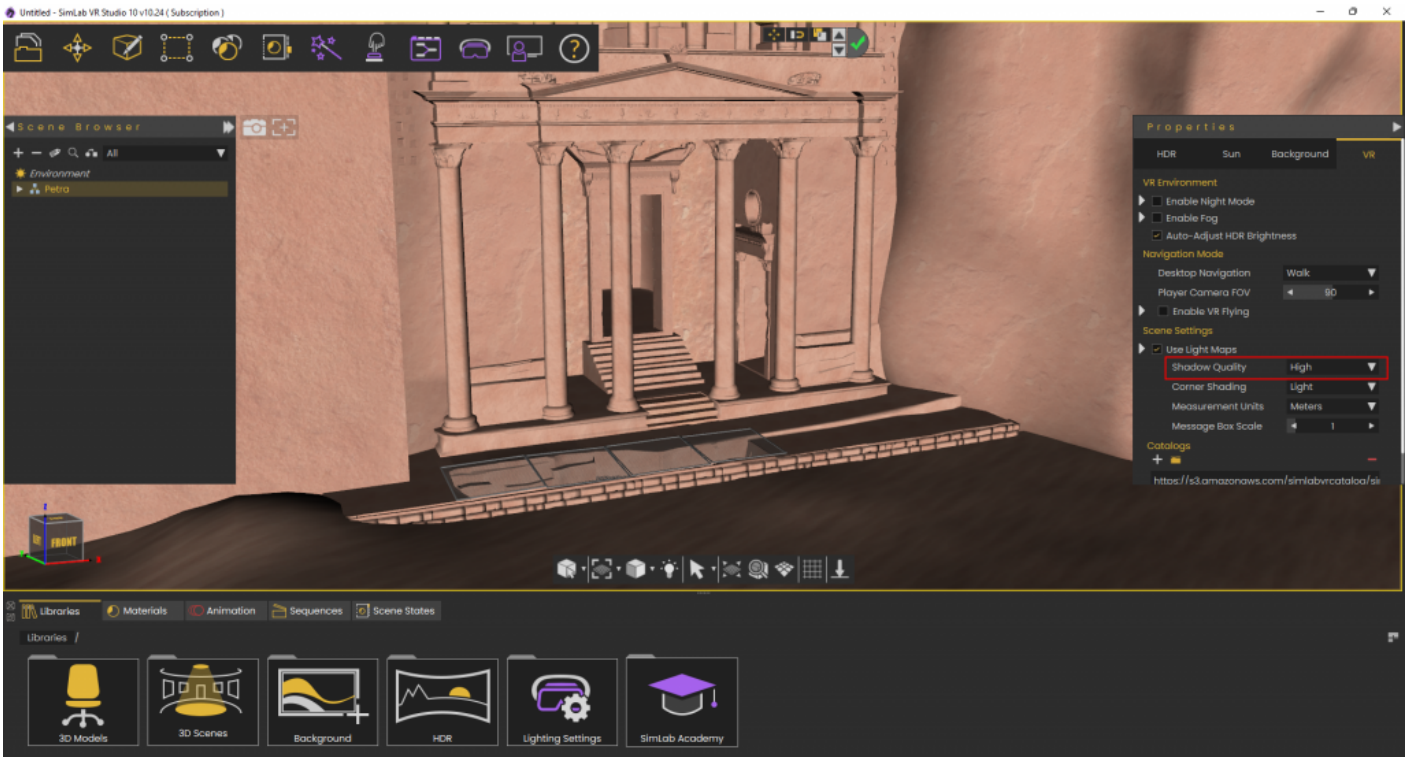
## Shadows Enable/Disable

Shadows can improve visual appearance of 3D models significantly. On low end devices likes Quest (Stand alone), Pico, Android, and iOS, shadow calculation can reduce responsivity of the device, which may affect the quality of the VR Experience. That is why shadows are turned off by default on those devices to give the user the ability to run larger VR Experiences.

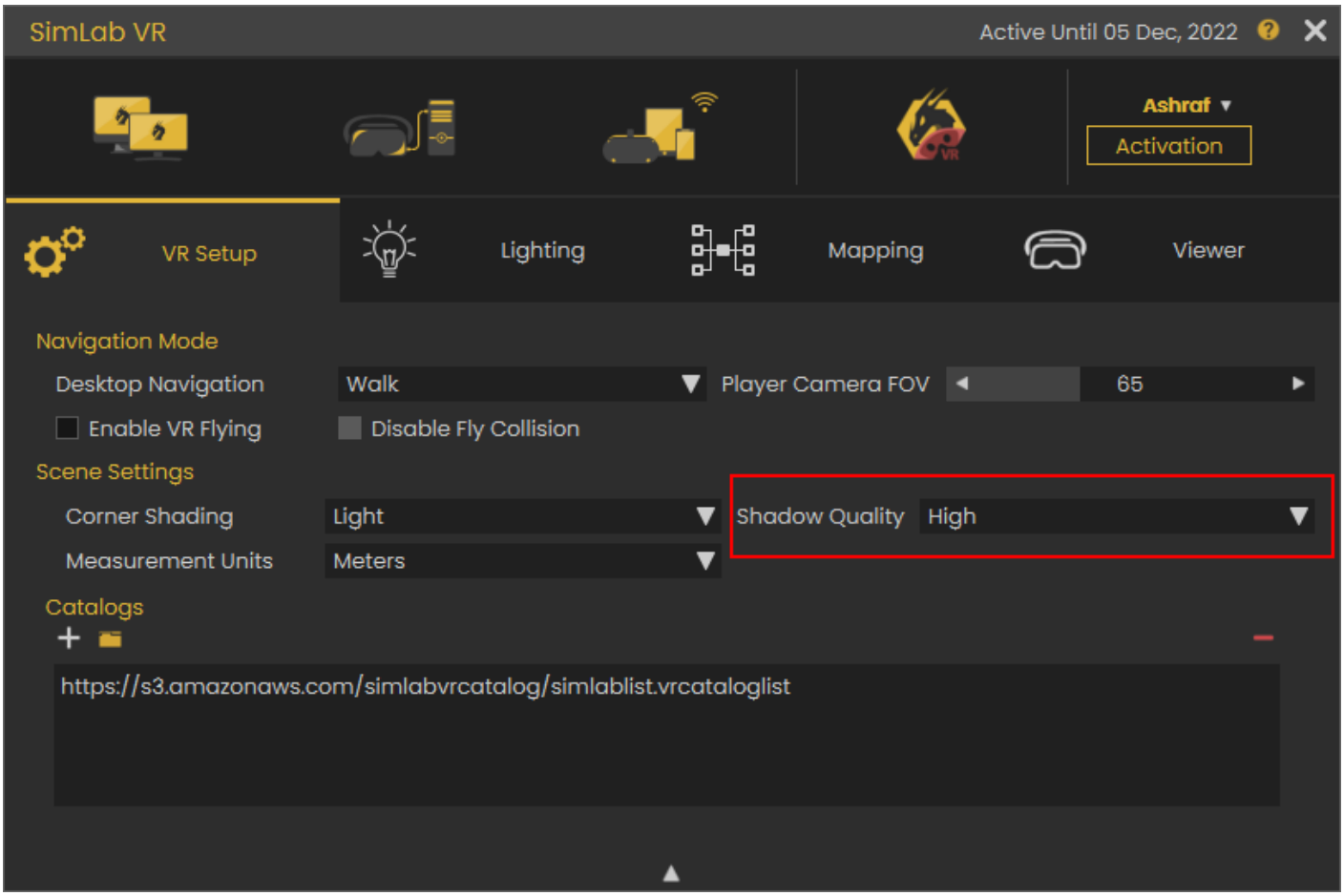
If the user decides that the experience is small and should run fine with shadows on those devices, it can be enabled by setting shadow quality in the VR properties.

This option is available in both **SimLab VR Studio** and **SimLab VR Plugins for SketchUp and Rhino**.

## SimLab VR Studio




## SimLab VR Plugins for SketchUp and Rhino




> **Note:** To have shadows working, make sure to install the latest viewer on your device from the free VR Viewer **page**

# Disabling Editing Capabilities (View Only)

Make your Experiences View Only so no one can edit them or read them on **SimLab VR Studio.**

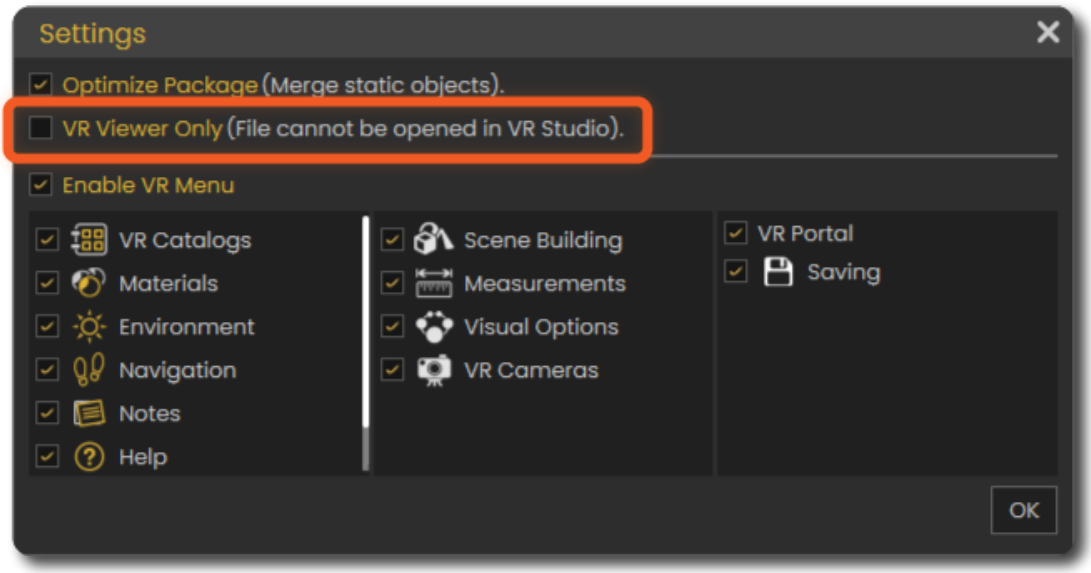
This option is available in both **SimLab VR Studio** and **SimLab VR Plugins for SketchUp and Rhino**.

## SimLab VR Studio

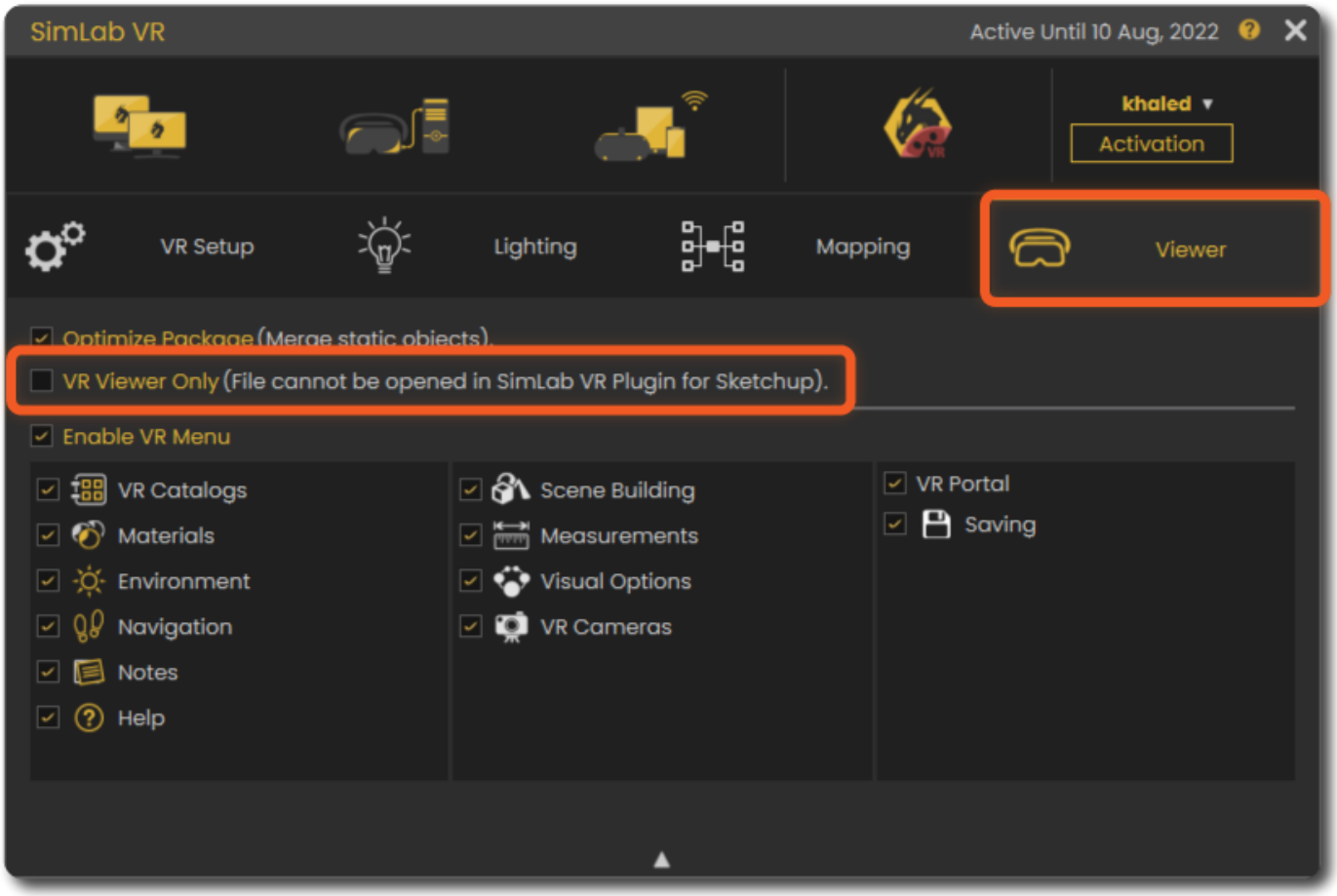
- Go to **VR Viewer > Show in Viewer > Settings**




- Check **VR Viewer Only.**




## SimLab VR Plugins for SketchUp and Rhino




# Disabling Items in the VR Menu

Control what to enable or disable in the VR Viewer menu for your clients.

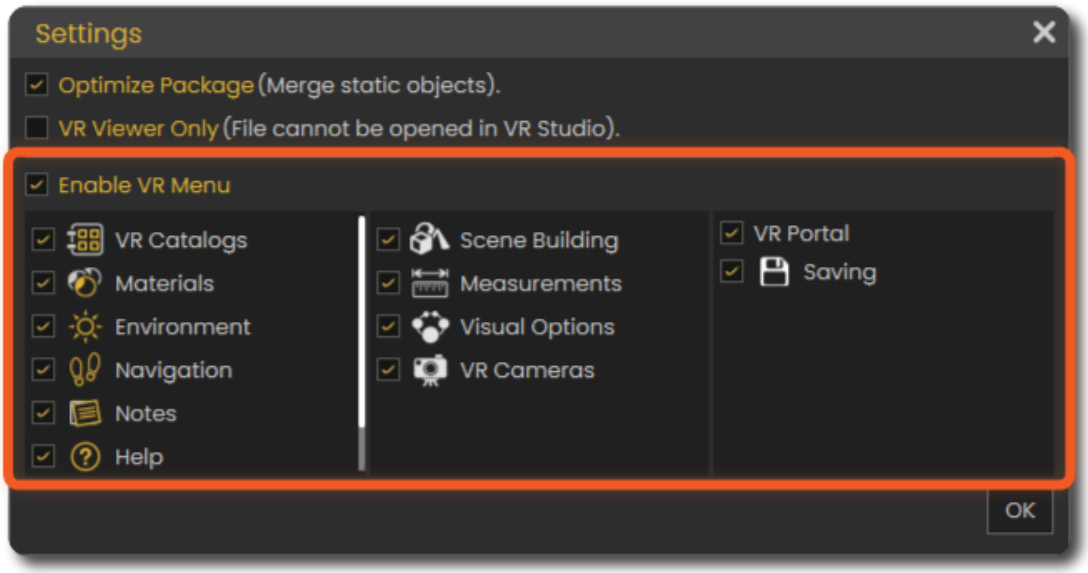
This option is available in both **SimLab VR Studio** and **SimLab VR Plugins for SketchUp and Rhino**.

## SimLab VR Studio

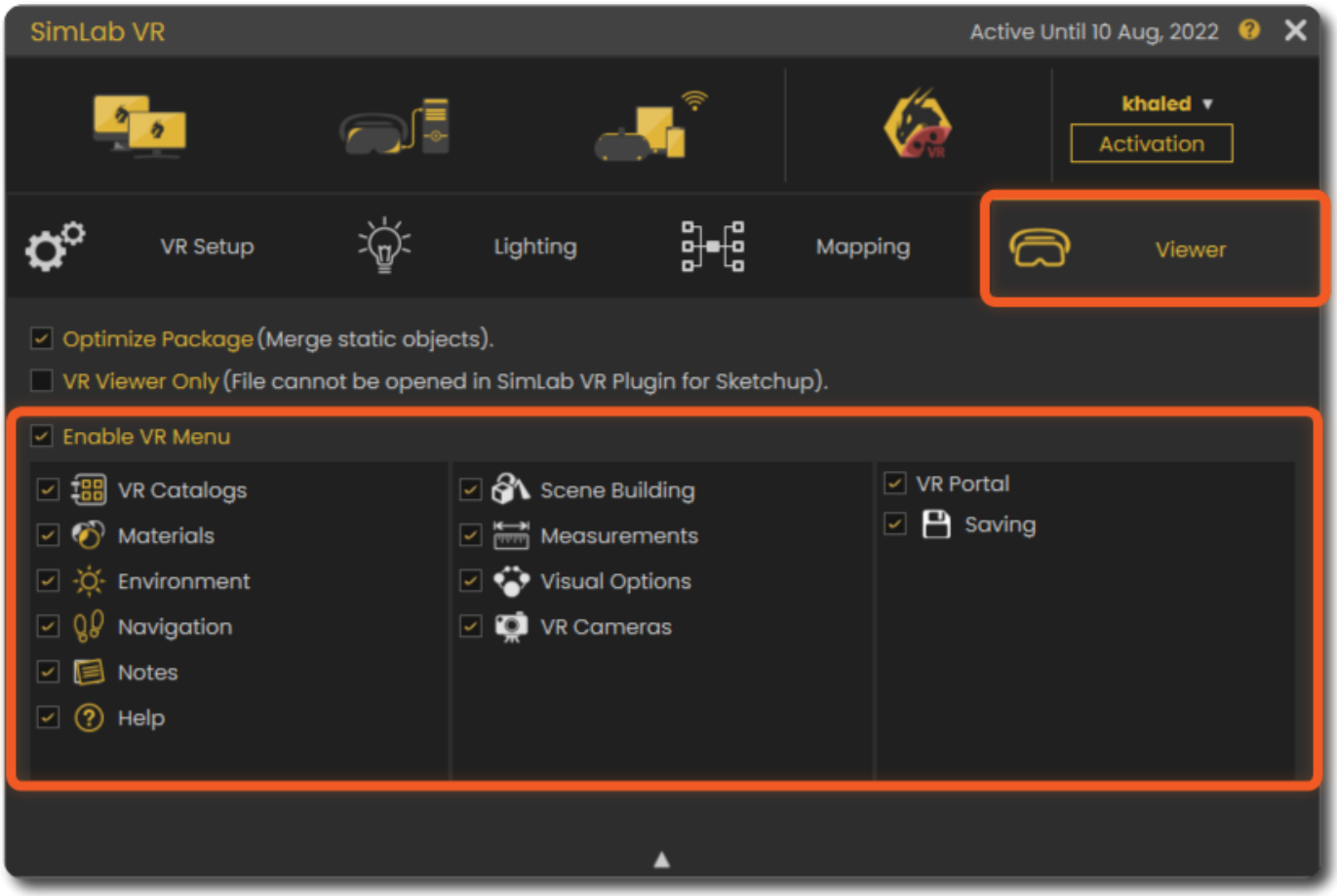
- Go to **VR Viewer > Show in Viewer > Settings**




- Check and uncheck **what you want to disable or enable in the VR menu.**




## SimLab VR Plugins for SketchUp and Rhino


SimLab VR
Active Until 10 Aug, 2022
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Activation
VR Setup
Lighting
Mapping
Viewer
Optimize Package (Merge static objects).
VR Viewer Only (File cannot be opened in SimLab VR Plugin for Sketchup).
Enable VR Menu
VR Catalogs
Materials
Environment
Navigation
Notes
Help
Scene Building
Measurements
Visual Options
VR Cameras
VR Portal
Saving