



glue.

Human presence. Whenever, wherever.

About the Software

glue.

ABOUT GLUE

GLUE is a virtual collaboration solution which allows several people to participate same virtual session independent of participants location.

GLUE allows you to communicate with other session participants, move around the scene (walking or teleport) and use tools to manipulate objects and interact with the surroundings.

Participants are displayed by avatars and physical movements in real world are mirrored to the avatars in the virtual world.

Requirements



HARDWARE - DESKTOP

Recommended VR and Audio gear:

- **HTC Vive** with **a)** HTC Vive Deluxe Audio strap or **b)** Good quality closed headphones without microphone
- **Oculus Rift** (gear includes audio devices)
- **Windows Mixed Reality** headset with Kingston HyperX Cloud II gaming headphones (inc mic).

Recommended computer hardware

- Graphics: nvidia GTX 1070 or GTX 1070 Ti
- Processor: Current generation i7 or i5
- Memory: 16GB or more
- Hard drive: SSD

Example PC configurations

- Desktop: Acer Predator G3-710 (SKU (DG.E08EQ.060)
- Laptop: Asus ROG Strix GL502VS 15,6” (SKU GL502VS-GZ227T/R / GL502VS-GZ227T)

INTERNET CONNECTIONS AND OPERATING SYSTEMS

Internet Connections and OS

- Reliable Internet connection (all participants): Cable or 4G/LTE preferred.
- OS: Windows 10 (version 1703 or later)
- OS: MacOS

VR Device Instruction Videos

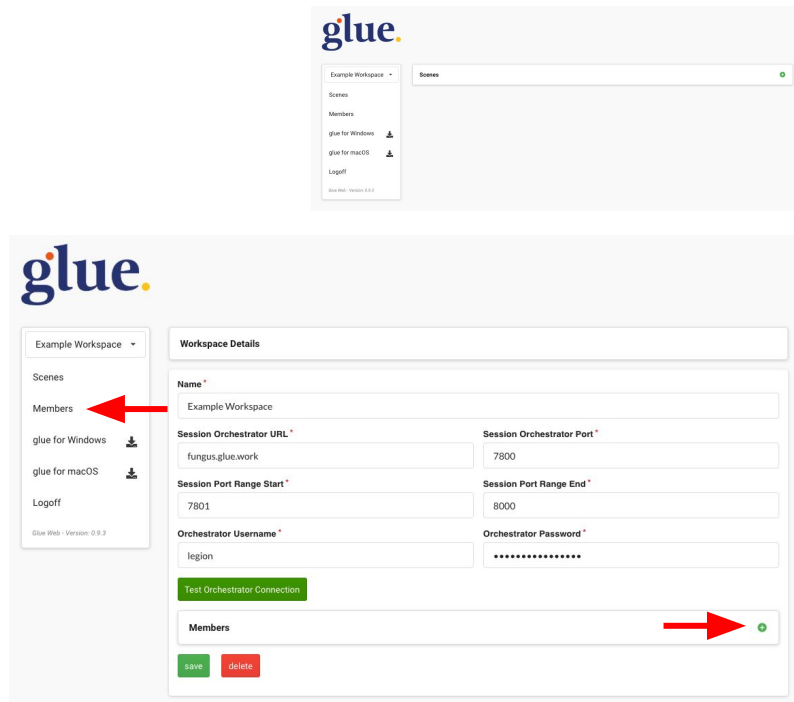
- HTC Vive: <https://vimeo.com/264976652/d91e7b90b0>
- Oculus Rift: <https://vimeo.com/264976758/ddcfc75d85>
- Windows Mixed Reality: <https://vimeo.com/264976703/8db3880574>

Workspaces - For Workspace Admin



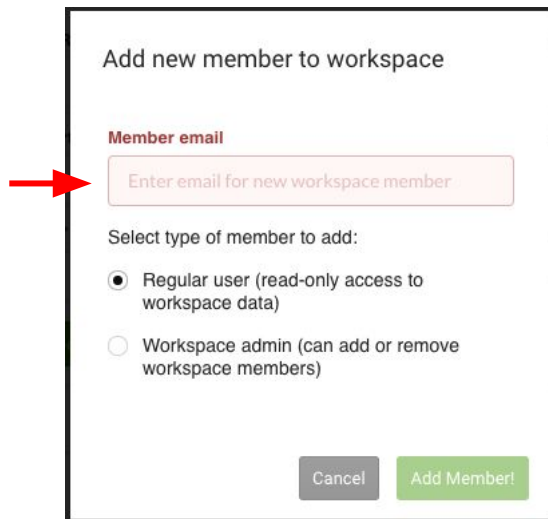
ADDING NEW MEMBERS TO A WORKSPACE

- Use web browser to access the Glue app site:
<https://app.glue.work/>
- Log in using the username and password
- In the navigation panel, click on the Members link.
- Click on the plus symbol in the Members panel at the bottom of the page.



ADDING NEW MEMBERS TO A WORKSPACE

- Add the member e-mail address and user type.
Workspace Admins can add and remove members and scenes, regular users have read-only access.



Add new member to workspace

Member email

Enter email for new workspace member

Select type of member to add:

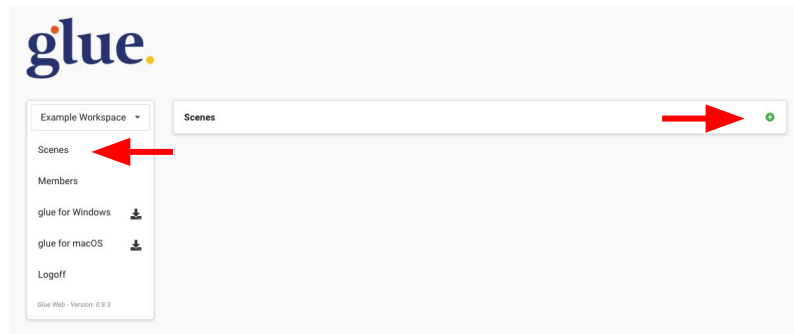
☒ Regular user (read-only access to workspace data)

☐ Workspace admin (can add or remove workspace members)

Cancel Add Member!

ADDING SCENES TO A WORKSPACE

- In the navigation panel, click on the Scenes link.
- Click on the plus symbol in the Scenes panel at the top of the page.



ADDING SCENES TO A WORKSPACE

- Scene Name is the title of the scene which will appear in all scene selection dialogs. This can be anything and is only used to identify the scene instance. Asset Name and Asset URL must be entered exactly as published in the list of available scene assets.

Example Asset URL list:

Asset Name	Asset URL
Lounge	https://limu.fake.fi/bundles/glue/lounge/lounge_scene
EngineGallery	https://limu.fake.fi/bundles/glue/engine_gallery/enginegallery_scene
Hall	http://limu.fake.fi/bundles/glue/hall/hall_scene

NOTE! In a near future update, this step will be replaced by a simple dropdown selection.

Create a New Scene

Scene Name *

Asset Name *

Asset URL *

Scene Host URL

Scene Host Port Range Start

Orchestrator Port

☐ Disable orchestration

Active workspace:
Example Workspace

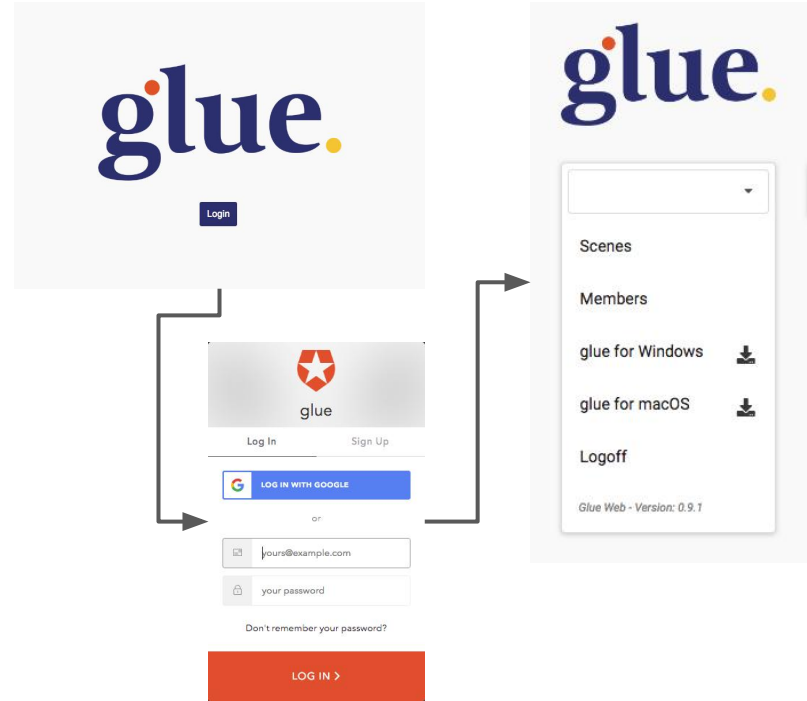
User Guide



SOFTWARE DOWNLOAD

Glue requires personal login info to allow access to scenes which Glue administrator has granted.

- Use web browser to access the Glue app site:
<https://app.glue.work/>
- Log in using the username and password
- If don't have existing user info use Sign Up to create an account. You will get confirmation mail to the given email address.
- Download the Glue for your preferred operating system.



SYSTEM SUPPORT - WINDOWS

To install Glue

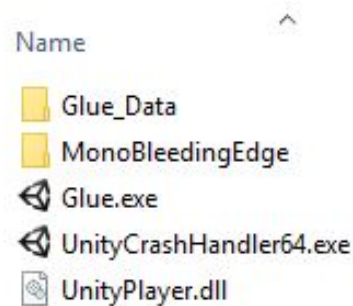
Unzip the file to preferred location in PC (i.e. Desktop)

Start Glue.exe

Before first time use:

Windows might not open the application directly without giving the operating system permission to start the software.

Right click Glue.exe and select **Properties > General tab > Security > Uncheck the Unblock check box**



SYSTEM SUPPORT - MAC

To install Glue

Unzip the file to preferred location in MAC (i.e. Desktop)

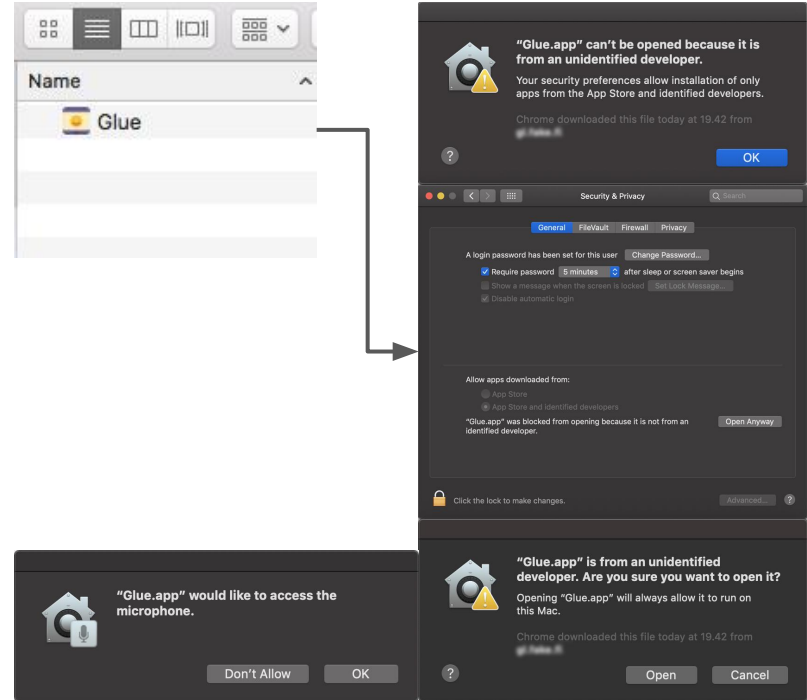
Start Glue Application from unzipped folder.

Before first time use:

MAC OS might not open the application directly without giving the operating system permission to start the software.

In System Preferences > Security & Privacy allow the application to be opened.

If the application asks to access the microphone, click ok to give the permission.



APPLICATION LOG IN

Glue requires personal login info to allow access to scenes which Glue administrator has granted.

To log in:

Use the previously created account info

Click “Log in”

This screen is shown only when previous login data is not found. Otherwise the previous login information is automatically used to log in the user.

Web browser window opens with log in options.



ENTER AVATAR NAME AND SELECT SCENE

After login return to the Glue application window.

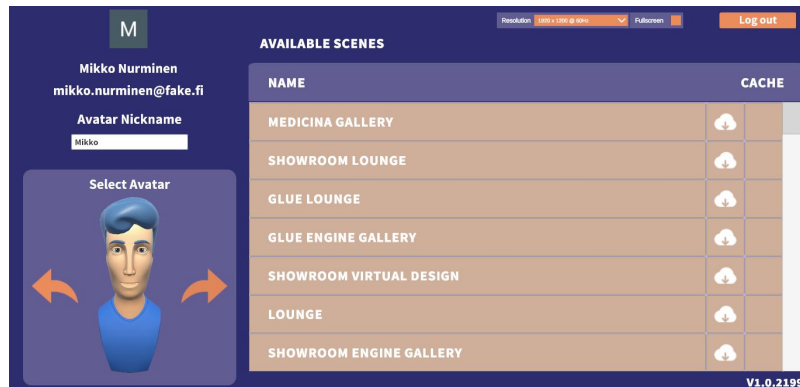
Enter name for the Avatar in the “Avatar Nickname” -field.

Select your Avatar

Available scenes will show all rooms associated with the login email account.

Click the scene you want to enter

Some scenes are larger sized, may be good idea to download the scene locally before entering the scene from the **cloud button**



USING GLUE IN DESKTOP MODE

In default Glue is used as a desktop mode with computer.

Press **Esc** to activate Fly mode.

Use **keyboard arrow keys or WASD keys** to move and mouse to Pan / view around.

Press **spacebar** to enable vertical movement



USING GLUE IN VR MODE

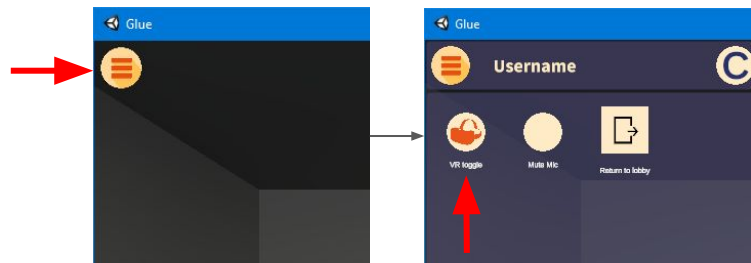
Glue is launched in desktop view by default, but can be switched to VR mode via menu.

To use in VR

- Click **Menu icon** in upper left corner to expand the menu.
- Click **VR toggle** icon

This activates the view in VR headset.
Wear the headset to start using Glue in VR.

NOTE! If mouse is not visible, press **Esc** (keyboard) to toggle visibility on/off.



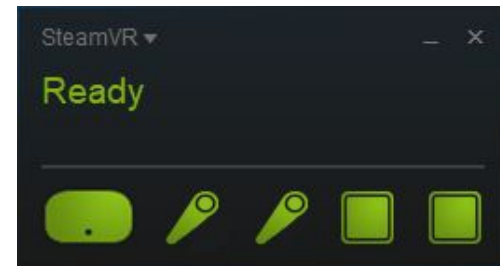
VR MODE / LAUNCH STEAM VR

For VR use the software requires that VR device and SteamVR application is in use before starting, so make sure you have SteamVR installed and set uped.

→ **Start SteamVR** application from the desktop icon.

More info:

https://support.steampowered.com/kb_article.php?ref=2001-UXCM-4439



NOTE! SteamVR needs to be started and function before starting the Glue application. Otherwise audio issues might encounter for Windows users.

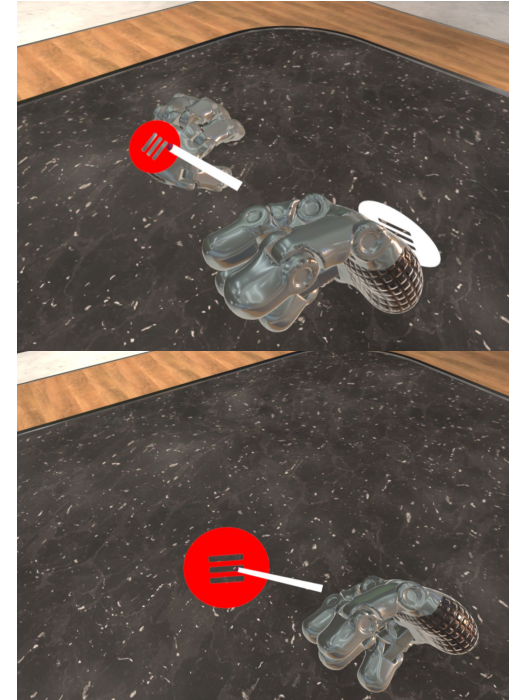
TOOLS - MENU ACCESS

If the user has VR hand controllers in use there is a menu to access selection of tools. These might vary depending of the software version or customization for specific organization.

Accessing tools menu

- Point at the **hamburger menu**
- Pull the **controller trigger**

With 2 controllers the menu is connected to back of hands.
With 1 controller the menu is floating in low center of view.



TOOLS - TELEPORT

Teleport is by default assigned to thumbpad on the controller.

Teleport allows the user to move around in the scene easily and in greater distances than a typical physical VR play area allows.

NOTE! **Green arrow:** Teleport to location is possible
Red arrow: Teleport to location is not possible



TOOLS - GROUP TELEPORT (BETA VERSION)

Group teleport tool allows one user to move all users in the scene.

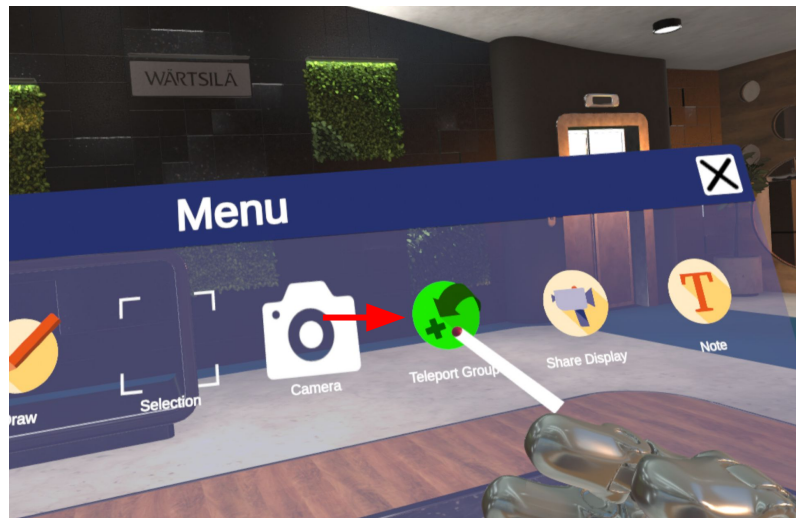
Selecting the Tool

- In menu > use controller to point at **Teleport Group tool icon** and **pull trigger**
- Point **X** and **pull trigger** to close menu

Using the Tool

When teleport selected > **keeping trigger pulled** > Use arrow to point where to teleport > **release trigger** to teleport. Tool will visualize where other users will relocate.

NOTE! Be aware that with this tool everyone else will teleport as well. Meant to use mostly by host and inform other users before teleporting for good use experience.



TOOLS - CHANGE SCENE IN VR

In VR mode you can change directly to another room from tool menu without need to use desktop program menu.

Selecting the Tool

→ In menu > use controller to point at **Change Scene tool icon** and **pull trigger**

Using the Tool

Change Scene tool opens a list of possible scenes to enter. This tool will take the user and all other people in current scene to a new scene.

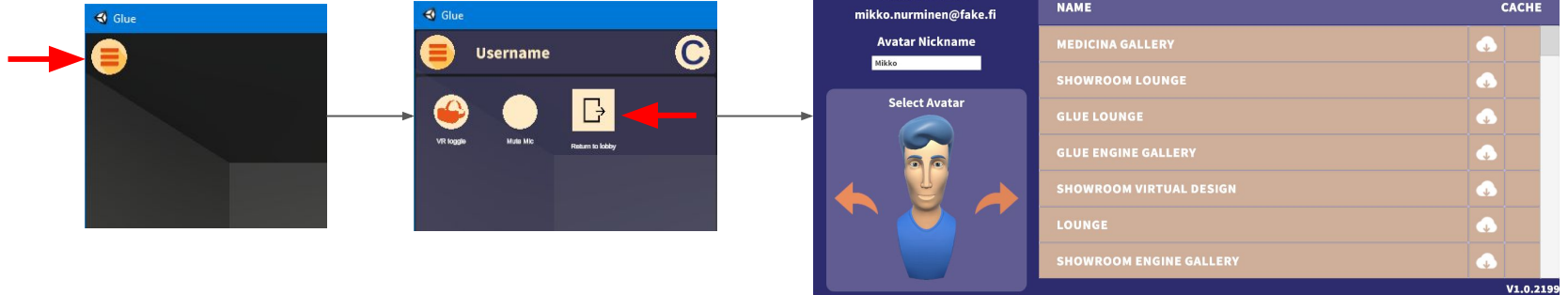
NOTE! When you change to another scene all people with you in same room will also move along with you.



RETURN TO LOBBY

Press **Esc** to toggle mouse visible

- Click **Menu**
- Click **Return to lobby**



NOTES

Exiting rooms or the application is done by pressing ALT + F4 key combination or clicking the X in the upper right of the screen.

To make the application window full screen press ALT + Enter

The application automatically logs in the previous user when re-opened. This can be prevented by logging out in the “Room selection” view.

Only the administrator is required to create rooms and add access to rooms.

Steps for Quick Setup



QUICK SETUP / VR WITH WINDOWS PC

Hardware and OS

1. Make sure that PC is on and user logged in to Windows or MacOS operating system
2. Make sure that VR headset and controllers are switched on

Software

1. Start SteamVR application
2. Start Glue application
3. Log in Glue (if the user is already logged in this is skipped)
4. Select Scene to enter
5. Select VR mode from Glue menu

Begin Use

1. Wear a VR headset and start using the software

Troubleshooting



TROUBLESHOOTING - CAN'T HEAR AUDIO

Start SteamVR before starting the Glue application

Check SteamVR audio settings

→ Audio and microphone are set to “Do not change device”

Check Windows sound settings

→ Playback > HTC Vive set as default

→ Recording > HTC Vive set as default microphone

TROUBLESHOOTING - SCENE MOVES OR FLICKERS

If the surrounding scene disappears, moves or is tilted when using the VR mode

- Make sure that there are not big reflective surfaces around the VR play area (mirrors, windows, large shiny metal surfaces, etc.)
- Make sure that base stations are not moving and have not moved since play area setup
- Redo VR play area setup according your device instructions
- Make sure the user is staying inside the play area and in view of the base stations

TROUBLESHOOTING - GENERAL

General issues

- Switch off computer and all VR devices
- Restart computer and all VR devices
- Re-install / update SteamVR

Additional

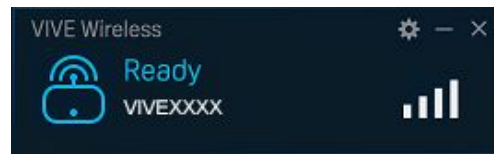
glue.

VR DEVICE / HTC VIVE WIRELESS

If you use HTC Vive wireless device you need to use VIVE Wireless software to allow the headset to work and connect to SteamVR

→ **Start Vive Wireless** software from the desktop icon before or after starting SteamVR.

More info: <https://www.vive.com/eu/setup/wireless/>



glue.

www.glue.work