



User Guide

For HyperTunnel 2026.5.1

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User Guide

HyperTunnel lets people work together in the same 3D place, whether they are on site or far away: in the **HyperTunnel app**, on an iPad, an iPhone or a headset, and in the **Web Console**, in your browser.

Where to start

New to HyperTunnel

Set up your account, install the app and enter your first job.

On an iPad or iPhone

AR on site, VR from anywhere, scanning, photos and video.

On a headset

Meta Quest and HTC VIVE Focus Vision: hand gestures, moving around and the Shelf.

In the Web Console

Jobs, assets, exports and your profile, in your browser.

Business Admin

Users, business settings and approving new devices.

Something's not working

Error codes, checking your connection, and common fixes.

Browse the guide

Getting Started

- [Install the App](#): where to get the app for each device.
- [Signing In](#): your first sign-in, the authenticator code, and signing in to the app.
- [Your First Job](#): from account setup to working in a job with a colleague.

Devices

- [Devices](#): iPad and iPhone, Meta Quest and HTC VIVE Focus Vision, and what each can do.

App

- [Lobby and Job List](#): your jobs, checking out for offline work, and the Settings window.
- [Entering a Job](#): AR or VR, locations and calibration.
- [In a Job](#): the menu on each device, Settings, and leaving.
- [Moving Around](#): walking, Teleport, Rock Climb, World Rotate and Jump.
- [Objects](#): placing, moving, scaling and deleting 3D models, images, videos, PDFs and arrows.
- [Communication](#): talking, casting your camera and watching others'.
- [HyperNote](#): recording what happens in a job and playing it back.
- [Scanning](#) and [Avatars](#).

Web Console

- [The Web Console](#): the home page, the top bar, and what each role sees.
- [Job List](#): see, create, import and delete jobs.
- [Manage Job](#), [Duplicate Job](#) and [Enter Job from the Web](#).
- [Assets](#): register files to a job, and download its scans.
- [Exporting Content](#): export a whole job, or its assets.
- [Profile](#): your account and display name.
- For Business Admins: [Users](#), [Business Settings](#) and [Device Access Requests](#).

More

- [Availability](#): which devices and modes each feature works on.
- [Troubleshooting](#), [Glossary](#) and [Release Notes](#).
- The whole guide as a [PDF](#), to read offline.

Having an issue? Contact [HyperTunnel support](#).

Install the App

App

Device	Where to get it
iPad and iPhone	App Store
Meta Quest	Meta Quest store

Before you sign in to the app, set up your account in the Web Console (see [Signing In](#)).

See [Devices](#) for what each device can do.

Signing In

iPad & iPhone

Meta Quest

VIVE Focus Vision

You use one account in two places: the **Web Console** in your browser, and the **HyperTunnel app**. Signing in needs your **username**, your **password**, and a 6-digit **code** from an authenticator app on your phone. Set up your account in the Web Console first.

In the Web Console

The Web Console is where you manage jobs, assets and users.

A screenshot of the HyperTunnel web console login interface. It features a white background with a light gray border. At the top, the HyperTunnel logo is displayed. Below it, there are two input fields: 'Username' with a placeholder 'Enter your Username' and 'Password' with a placeholder 'Enter your Password' and a toggle icon. A dark blue 'Sign in' button is positioned below the password field. At the bottom, there is a link that says 'Forgot your password?'.

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Your first sign-in

When a Business Admin adds you, you receive an email with your username and a temporary password.

1. Enter your **Username** and the temporary **Password**, then click **Sign in**.
2. On **Change Password**, choose your own password, enter it again in **Confirm Password**, and click **Change Password**.
3. On **Set Up Authenticator App**, scan the QR code with an authenticator app such as Google Authenticator or Authy. (If you cannot scan it, copy the key shown under the QR code into the app.)

4. Enter the 6-digit code the app shows and click **Confirm**.

You are signed in. Your authenticator app now has an entry labelled **HyperTunnel** with your username. An older entry may be labelled **AWSCognito** instead; it works the same.



TIP

Set up your authenticator here, in the Web Console, before using the app. The app asks you to finish account setup on the web if you have not.

Signing in

1. Enter your **Username** and **Password** and click **Sign in**.
2. On **Confirm TOTP Code**, enter the 6-digit code from your authenticator app and click **Confirm**.

The code changes every 30 seconds; use the one the app shows now. Codes come from your app, not by email.

Forgot your password

1. On the sign-in screen, click **Forgot your password?**.
2. Enter your username and click **Send code**. A code is sent to your email.
3. Enter the **Code**, then your **New Password** twice, and click **Submit**.

Lost your authenticator

If you lose the phone or app that makes your codes, ask a Business Admin to **Reset MFA** for you (see [Users](#)). You receive a new temporary password and set up your authenticator again, as at your first sign-in.

Signing out, and the 60-minute session

- To sign out, open the person menu (top right) and click **Sign out**.
- You are signed out automatically **60 minutes after you sign in**, even if you are working, and without a warning. Save what you are doing before then. The sign-in screen tells you when this has happened.
- Signing out, in either way, signs out every Web Console tab open in that browser.

In the app

App

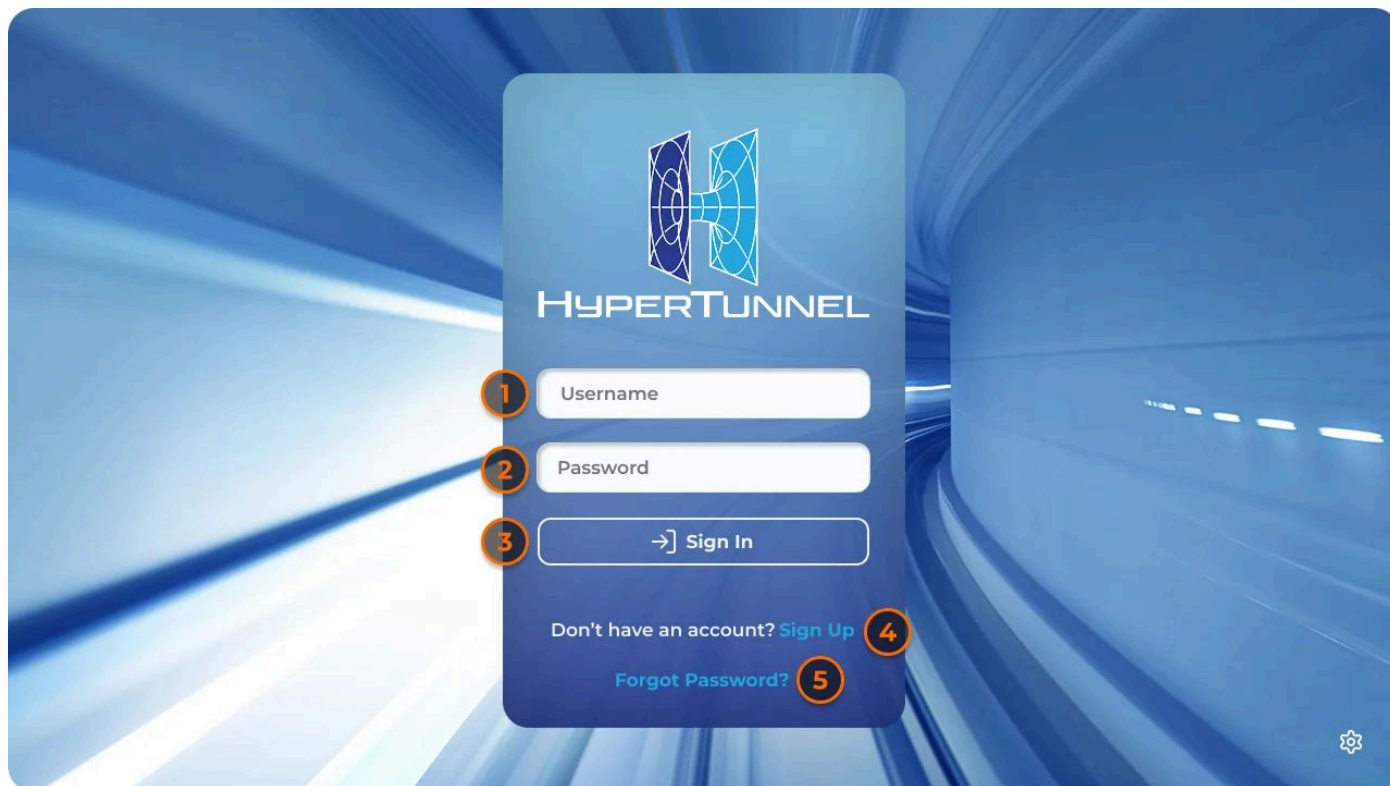
iPad & iPhone

Meta Quest

VIVE Focus Vision

Use the same username and password as in the Web Console, after you have set up your account there (see [Your first sign-in](#)). Until you have, the app stops after your password with "Additional setup required. Please proceed with account setup through the HyperTunnel web app."

A session starts when you sign in and ends when you sign out. Most of the time you are online. If the app cannot reach HyperTunnel when you sign in, it signs you in **offline** instead (see [Offline](#)).



Sign in

1. Enter your **Username** and **Password**.
2. Tap **Sign In**.
3. Enter the 6-digit code from your authenticator app. There is no button to press: the app signs you in when you type the sixth digit. **Cancel** goes back to the sign-in screen.
4. The job list opens (see [Lobby](#)).

On a **Meta Quest** or **HTC VIVE Focus Vision**, the lobby is see-through, so you can read the code on your phone without taking the headset off. Type on the app's floating keyboard. Press the button on your left wrist to bring the lobby window back in front of you.

If sign-in fails

Message	What to do
"Invalid Username/Password, Please Try Again."	Check your username and password
"Incorrect verification code, please try again."	Enter the code your authenticator app shows now
"Verification code expired, please sign in again."	Tap Cancel and sign in again
"Additional setup required. Please proceed with account setup through the HyperTunnel web app."	Your account is new, or a Business Admin reset your authenticator. Finish setting up in the Web Console (see Your first sign-in), then sign in to the app
"Sign-in denied. A device access request has been submitted to your business administrator for approval."	Your business allows only approved devices. Wait for your Business Admin to approve this one, then sign in again (see Devices your business must approve)

- **Forgot Password?** opens the HyperTunnel website. You can also reset your password from the Web Console sign-in screen (see [Forgot your password](#)).
- **Sign Up** opens the HyperTunnel website, to contact sales. Accounts are created by your Business Admin.
- The gear (bottom right) opens [Lobby Settings](#), which works before you sign in.

Devices your business must approve

Some businesses allow sign-in only from devices they manage and have approved. On such a business:

- An unmanaged device is refused: "Sign-in as a user with access to CUI is denied on an unmanaged device."
- A managed device that is not yet approved is refused, and a request goes to your Business Admin automatically: "Sign-in denied. A device access request has been submitted to your business administrator for approval."

When an admin approves the device (see [Device Access Requests](#)), sign in again.

While you are signed in

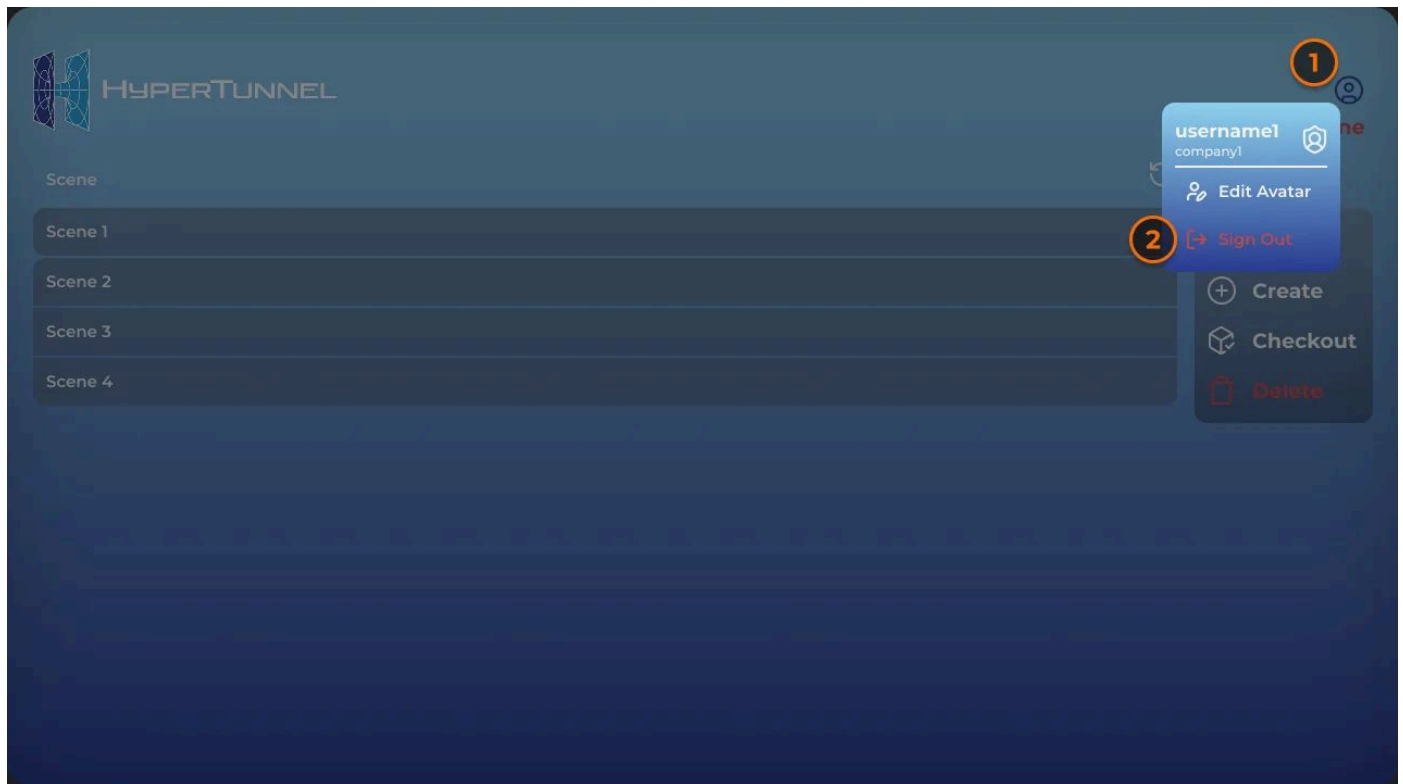
- If your connection looks poor after you sign in, the app tells you and shows the readings that were poor. You can carry on.
- Your session lasts **60 minutes from sign-in**. After that, the app signs you out when you are next on the job list (never in the middle of a job): "Your sign-in has expired. Please sign in again."
- You can be in a job on only one device at a time.

Offline

If the app cannot reach HyperTunnel when you sign in, you are signed in offline, and can work on jobs you have checked out. See [Offline Mode](#).

Sign out

1. On the job list, tap the person icon (top right). It shows your username and business.
2. Tap **Sign Out**.



Your First Job

1. **Set up your account in the Web Console.** Use the username and temporary password from your invitation email: choose a password and set up an authenticator app (see [Signing In](#)). Do this before using the app.
2. **Install the app and sign in** with the same username, password and authenticator code (see [Install the App](#)).
3. **Create a job**, in the Web Console (**Jobs** → **Create Job**; see [Job List](#)) or in the app (see [Create Job](#)).
4. **Enter the job.** In the app, pick it from the job list and tap **Enter** (see [Enter Job](#)). Or, on your iPhone, iPad or Quest, open the Web Console and choose **Enter Job** in the job's  menu (see [Enter Job from the Web](#)).
5. **Work together.** Ask a colleague to enter the same job. You see each other and can talk (see [Communication](#)).

Learn more

- [In a Job](#): the menu and its tools on each device.
- [Availability](#): every feature, and the devices and modes it works on.
- [Glossary](#): the words HyperTunnel uses.

Having an issue?



TIP

How smoothly a job runs depends on the device and on the job: many objects or large assets slow it down. A more capable device performs better.

See [Troubleshooting](#), or contact [HyperTunnel support](#).

Devices

Device	In a job	Get the app
iPad and iPhone	AR mode on site, VR mode from anywhere. Scan, Photo, Video and Torch	App Store
Meta Quest	VR, with hand tracking. Shelf, Arrows, Rock Climb, World Rotate	Meta Quest store
HTC VIVE Focus Vision	The same as Meta Quest	

Which features each device has: see [Availability](#).

iPad and iPhone

App

iPad & iPhone

Get the app from the [App Store](#).

On an iPad or iPhone you choose, each time you enter a location, how to be there:

- **AR mode**, on site: the job's content appears on the real place, through the camera. The app calibrates to the location first (see [Calibration](#)).
- **VR mode**, from anywhere: you see the location's 3D scan and move around it by moving your device.

See [Location Selection](#).



Tools by mode

AR mode	VR mode
Settings, Stream, Jump, HyperNote, Scan , Video , Photo	Settings, Stream, Jump, HyperNote, Shelf

See [In a Job](#).

Only on iPad and iPhone

- [Scan](#) a location in 3D (needs a LiDAR device: iPad Pro or iPhone Pro).
- [Photo](#) and [Video](#) of the real place.
- [Torch Mode](#) for dark places.
- Entering a location in AR, and [adding locations](#) on site.

Layout

- **iPad:** the menu runs down the side of the screen, in either orientation.
- **iPhone:** the menu runs along the bottom, with separate layouts for portrait and landscape.
- Others see you as a tablet or phone showing your live camera (see [Avatars](#)).

Opening a job from the Web Console

With the app open and signed in, choose **Enter Job** in the Web Console on the same device, and the app opens the job (see [Enter Job from the Web](#)).

Meta Quest

App

Meta Quest

HyperTunnel runs on **Meta Quest 3** and **Meta Quest 3S**. Get it from the [Meta Quest store](#).



Hands, not controllers

HyperTunnel is used with **hand tracking**. Controllers are not supported. You pinch to grab, poke buttons with your fingertip, and use gestures to move (see [Interactions](#) and [Moving Around](#)).

In the lobby

- The lobby is **see-through**, so you can see your room, and read your authenticator code on your phone, without taking the headset off.
- Type on the app's floating keyboard.
- The button on your left wrist brings the lobby window back in front of you.

In a job

- You enter the job's **Homebase** in VR, and the menu opens in front of you (see [In a Job](#)).

- The menu has: HyperNote, Jump, Settings, **Rock Climb**, **World Rotate**, Stream, Shelf and **Arrow**.
- Move with [Teleport](#), [Rock Climb](#), [World Rotate](#) and [Jump](#).
- Place files from the [Shelf](#) and point things out with [Arrows](#).
- [Spatial Audio](#) is in Settings on headsets only.
- Others see you as a full-body avatar whose hands follow yours, and see your view when you share it (see [Avatars](#)).

Scan, Photo and Video are iPad and iPhone tools.

Opening a job from the Web Console

With the app open and signed in, open the Web Console in the Quest browser and choose **Enter Job**: the app opens the job (see [Enter Job from the Web](#)).

HTC VIVE Focus Vision

App

VIVE Focus Vision

HyperTunnel on HTC VIVE Focus Vision works like it does on Meta Quest: the same menu, tools and gestures (see [Meta Quest](#)).

Hands, not controllers

HyperTunnel is used with **hand tracking**; controllers are not supported. Pinch to grab, poke buttons with your fingertip, and use gestures to move (see [Interactions](#) and [Moving Around](#)).

A quick pinch counts as a tap if you release it within about a third of a second.

In the lobby

- The lobby is **see-through**, so you can read your authenticator code on your phone without taking the headset off.
- Type on the app's floating keyboard.
- The button on your left wrist brings the lobby window back in front of you.

In a job

The same as on Meta Quest: you enter **Homebase** in VR with the menu in front of you, and have HyperNote, Jump, Settings, Rock Climb, World Rotate, Stream, Shelf and Arrow (see [In a Job](#)).

Differences from Meta Quest

- **Enter Job from the Web Console does not open the app** on Focus Vision: the link stays in the browser. Enter jobs from the app's job list instead (see [Enter Job](#)).

Lobby and Job List

- App
- iPad & iPhone
- Meta Quest
- VIVE Focus Vision

See also: [Entering a Job](#)

After you sign in, the app shows your business's jobs. A **job** is a shared 3D workspace for a task, a service ticket or a project, made of one or more locations.



Control	What it does
Person icon (top right)	Your username and business, and Sign Out (see Sign In / Sign Out)
Offline	Shown when you are signed in offline (see Offline Mode)
Refresh	Reloads the list. Online, the list also refreshes itself every 10 seconds; the countdown shows beside it
Enter	Enters the selected job (see Enter Job)

Control	What it does
Create	Creates a job (see Create Job)
CheckOut / CheckIn	Takes a job for offline work, or returns it (see Check In/Check Out)
Delete	Deletes the selected job (see Delete Job)
Gear (bottom right)	Lobby Settings

Select a job by tapping its name. **Enter** is greyed out when you cannot enter the selected job, for example when someone else has it checked out, or when you checked it out yourself and are online.

You can also manage jobs in the Web Console (see the Web Console's [Job List](#)).

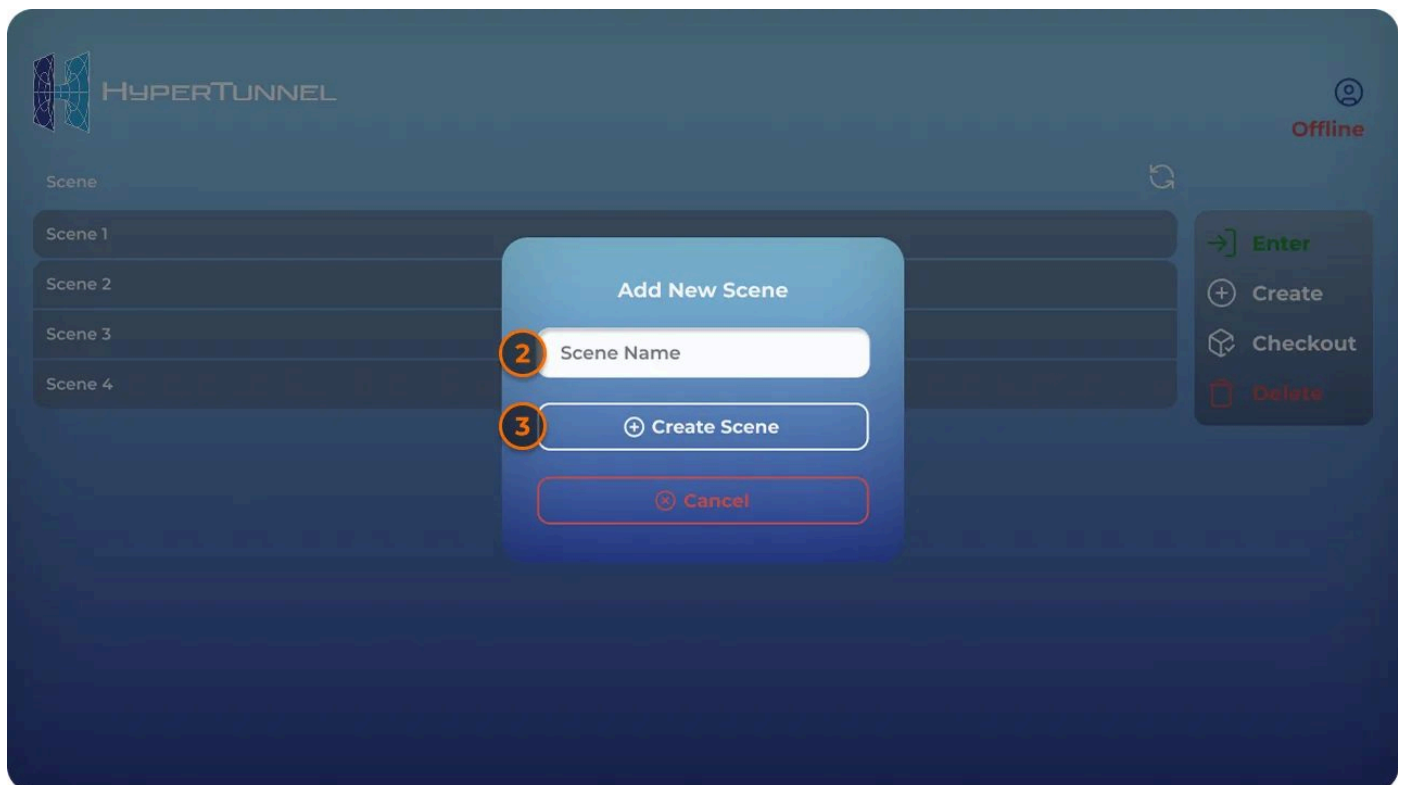
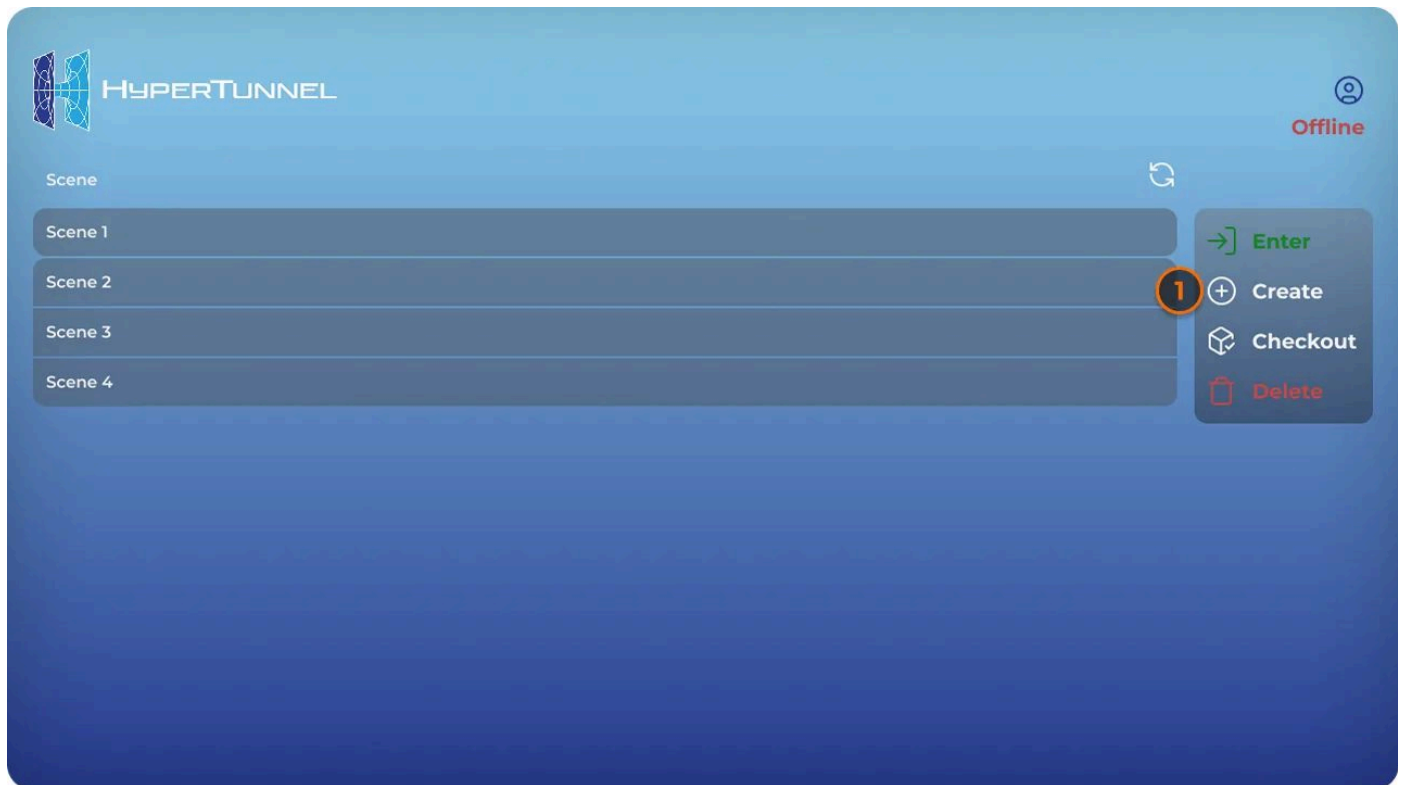
On a headset, the job list floats in front of you. Press the button on your left wrist to bring it back in front of you.

Create Job

[App](#)
[iPad & iPhone](#)
[Meta Quest](#)
[VIVE Focus Vision](#)

A job is a shared workspace for a task, a service ticket or a project. Create one from the app's job list, or from the Web Console (see [Job List](#)).

1. On the job list, tap **Create**. The **Add New Job** window opens.
2. The name is filled in with a generated name such as `26285-01`: the year and day of the year, then a number for that day. Keep it or type your own.
3. Tap **Create Job**, or **Cancel**.



The job appears in the job list. Job names follow the rules in the Web Console's [Job List](#), and must be unused in your business.

Offline, the job is created on your device and is checked out to you (see [Offline Mode](#)).

Delete Job

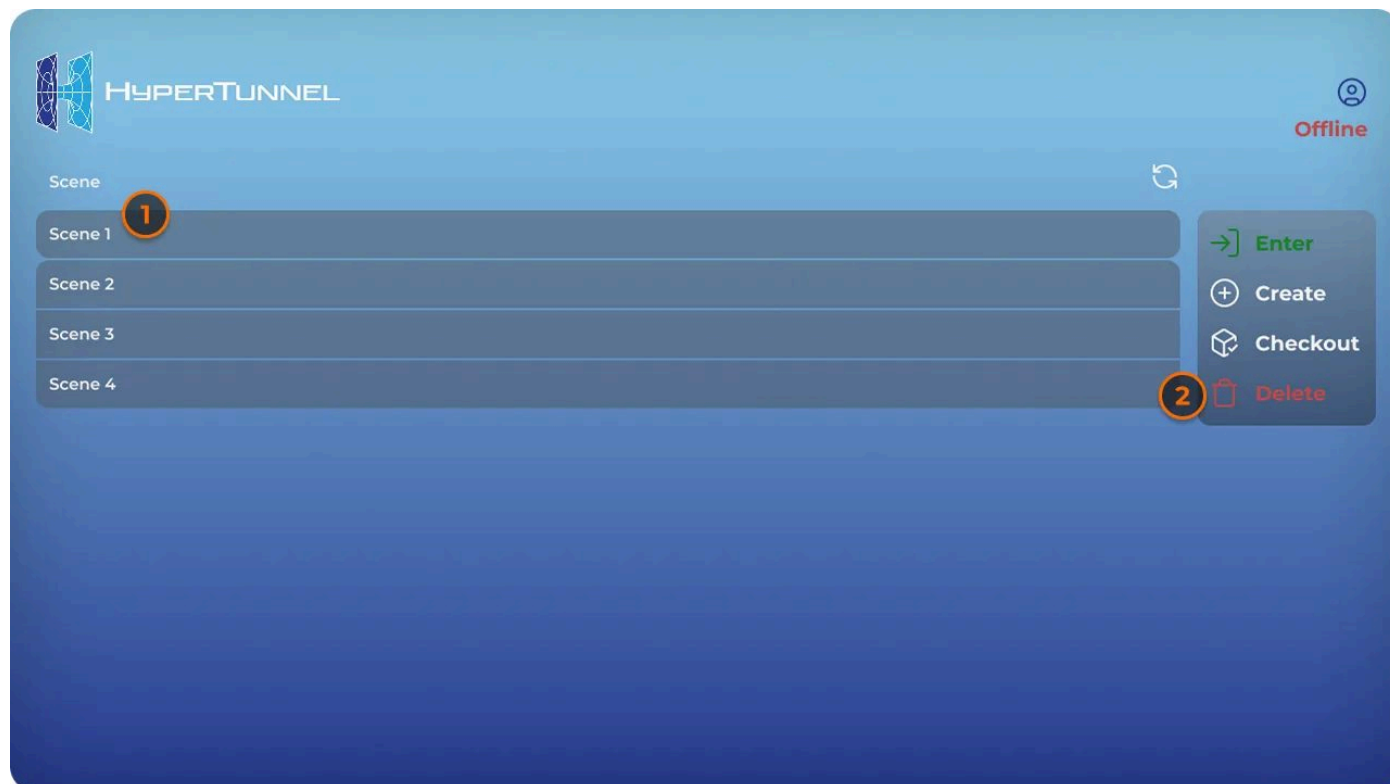
App

iPad & iPhone

Meta Quest

VIVE Focus Vision

1. On the job list, select the job.
2. Tap **Delete**.
3. "Confirm to Delete Job ..." asks you to check. Tap **Confirm**, or **Cancel**.



WARNING

Deleting a job cannot be undone. The job's copy on your device is removed too.

- **Delete** is available for a job nobody has checked out, or one checked out to you. A Business Admin can also delete a job that someone else has checked out.
- "Job is currently being processed. Please try again later" means HyperTunnel is working on the job, for example exporting or duplicating it. Try again later.
- Offline, the deletion is applied the next time you sign in online.

You can also delete jobs in the Web Console (see [Job List](#)).

Check In/Check Out

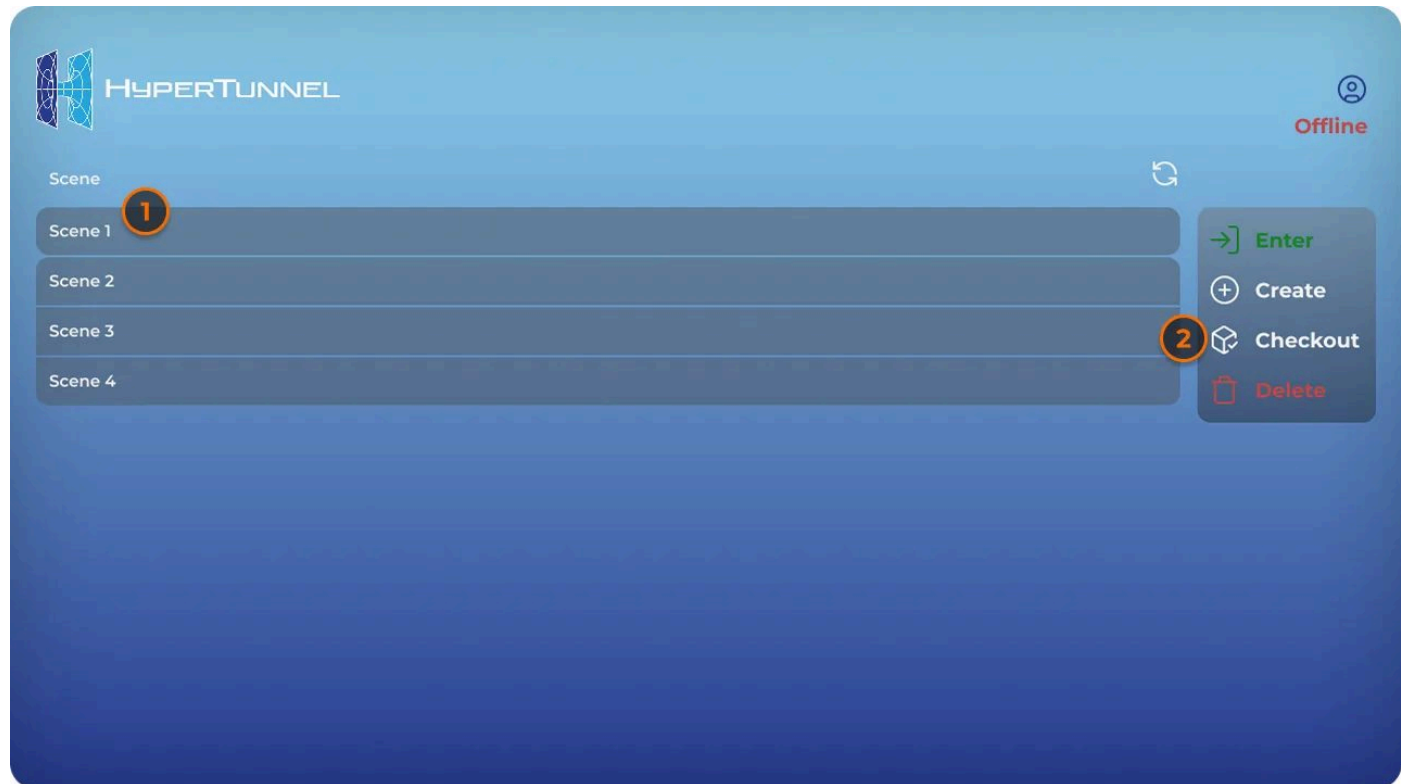
App

iPad & iPhone

Meta Quest

VIVE Focus Vision

Checking out a job copies it to your device so you can work on it offline. While it is checked out to you, nobody else can enter it. Checking it in sends your changes back and frees it for everyone.



Check out

1. While online, select a job on the job list.
2. Tap **CheckOut**. The app downloads the job ("Preparing...").
3. "Job ... check out successful" confirms it.

You can now enter the job **only while offline** (see [Offline Mode](#)). Online, **Enter** is greyed out for it.

A job that HyperTunnel is working on, or that someone else has checked out ("Checked out by ..."), cannot be checked out.

Check in

1. While online, select the job. The button now reads **CheckIn**.
2. Tap **CheckIn**.

3. "Job ... check in successful" confirms it.

A Business Admin can check in a job that someone else has checked out, for example when that person is away. The admin's device has no copy of the job, so the app asks first: "Failed to find local data to check in. Server data will be unchanged. Proceed anyway?" Tap **Confirm** to free the job. Changes made on the other device are not kept.

CheckOut and **CheckIn** need a connection.

Offline Mode

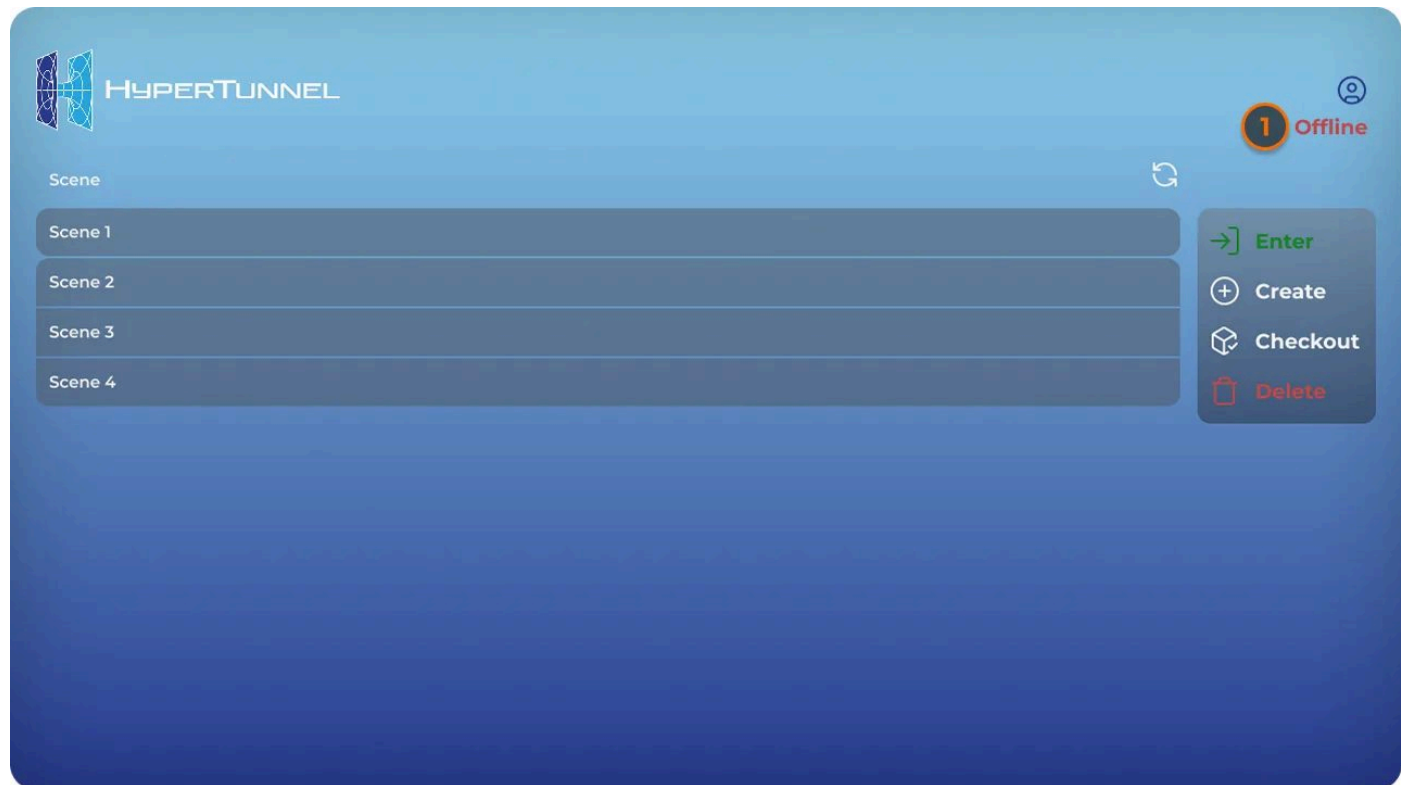
App

iPad & iPhone

Meta Quest

VIVE Focus Vision

Offline mode lets you keep working on a job without an internet connection, for example at a site with no signal. Check the job out first, while you are online (see [Check In/Check Out](#)).



Before you go offline

You must have signed in online **at least once on this device**, as the same user and with the same password. That first online sign-in is what stores what the app needs to sign you in offline.

How you go offline

When you sign in, the app checks the connection. If it cannot reach HyperTunnel within a few seconds, it signs you in offline. The red **Offline** label appears under the person icon.

If you lose the connection later, while signed in online, the app does not switch to offline mode. In a job you return to the job list with "Disconnected from server. Please try again."

What you can do offline

- **Enter** a job checked out to you, and use the tools that work offline. Voice, casting and live streams need a connection.
- **Create** a job. It is created on this device and counts as checked out to you.
- **Delete** a job. The deletion is applied the next time you sign in online.
- **Refresh** the list.

The job list shows only the jobs checked out to you on this device, and the jobs you created offline.

CheckOut and **CheckIn** need a connection.

Going back online

1. Sign out.
2. Sign in again with a connection.

The app then sends what you did offline. A report lists the jobs created and deleted, any that failed, and any **Conflict Checked-In Jobs**: jobs someone else checked in while you had them. Your offline changes to those are not kept. A job you created offline is added to the job list, still checked out to you: check it in to share it.

If you cannot sign in offline, you see "Failed to sign in offline."

Lobby Settings

App

iPad & iPhone

Meta Quest

VIVE Focus Vision

Open **Settings** with the gear at the bottom right of the sign-in screen or the job list. (Inside a job, Settings is in the menu instead; see [Settings](#).)

Setting	What it does
Version	The app version, for example "Version 2026.5.1". Quote it when you contact support
Torch	iPad and iPhone only. Turns on the torch in AR (see Torch Mode)
Network Diagnostics → Diagnose	Checks your connection (see below)
Reset Cache	Deletes the job files downloaded to this device. They download again when you next enter a job. Jobs you have checked out are kept
Quit App	Closes the app, after "Are you sure you want to quit the app?"
Save Changes	Closes the window. Settings apply as soon as you change them

Checking your connection

Tap **Diagnose**. "Running network diagnostic..." shows while it runs, then the result:

- **Overall:** Good, Usable or Poor.
- **Latency, Jitter, Loss, Download** and **Upload**, each with its rating. Download and Upload are measured only once you have signed in.

The app also runs this check when you sign in, and warns you if the connection looks poor.

NOTE

Use **Reset Cache** only when a job's content will not load. Do not use it while a scan or a check-in is still uploading.

Entering a Job

[App](#)[iPad & iPhone](#)[Meta Quest](#)[VIVE Focus Vision](#)[AR mode](#)[VR mode](#)

See also: [Enter Job from the Web](#) · [Scanning](#) · [Lobby and Job List](#)

A job is made of **locations**. Every job has a virtual location called **Homebase**. Other locations are real places, created on site with an iPad or iPhone.

Two ways to be in a job

You are in a job in one of two modes. Choose the one that fits where you are.

AR mode: on site

On an **iPad or iPhone**, standing at the real place. The job's content is placed on the place around you, through the camera.

1. On the job list, select the job and tap **Enter**.
 2. Choose a real location (not **Homebase**) and tap **AR Enter** (see [Location Selection](#)).
 3. Move the device slowly while the app lines it up with the place (see [Calibration](#)).
- Only one person can be in AR at each location.
 - In a dark place, turn on [Torch Mode](#) before entering.

VR mode: from anywhere

On **any device**. You see the location as a 3D model and move around it remotely.

- **iPad, iPhone:** select the job, tap **Enter**, choose any location, including **Homebase**, and tap **VR Enter**.
- **Meta Quest, HTC VIVE Focus Vision:** select the job and choose **Enter**. You go straight into **Homebase**, in VR, and the menu opens in front of you.

Once in, you can move between locations with [Jump](#).

Entering

The steps are in [Enter Job](#). You can also start from the Web Console on an iPhone, iPad or Quest (see [Enter Job from the Web](#)).

While the job loads, you may see "Downloading Asset... (n/N)", then "Waiting to enter job..." while HyperTunnel admits you. **Cancel** on either screen returns to the job list.

When you cannot enter

Entry is refused while something in the job needs it to stay still, or when the job is not available. The message tells you why, for example:

- "A HyperNote is currently being recorded. Please try again later."
- "Mesh scanning is currently in progress. Please try again later."
- "Maximum AR users reached at the selected location." Only one person can be on site in AR at each location: enter in VR, or choose another location.
- "Checked out by ...": someone has taken the job for offline work.
- "Job is currently being processed. Please try again later": HyperTunnel is exporting, importing or duplicating it.

Most messages end with a code, such as "(Error: D9)". [Troubleshooting](#) lists the codes and what to do.

Leaving

See [Exit Job](#).

Enter Job

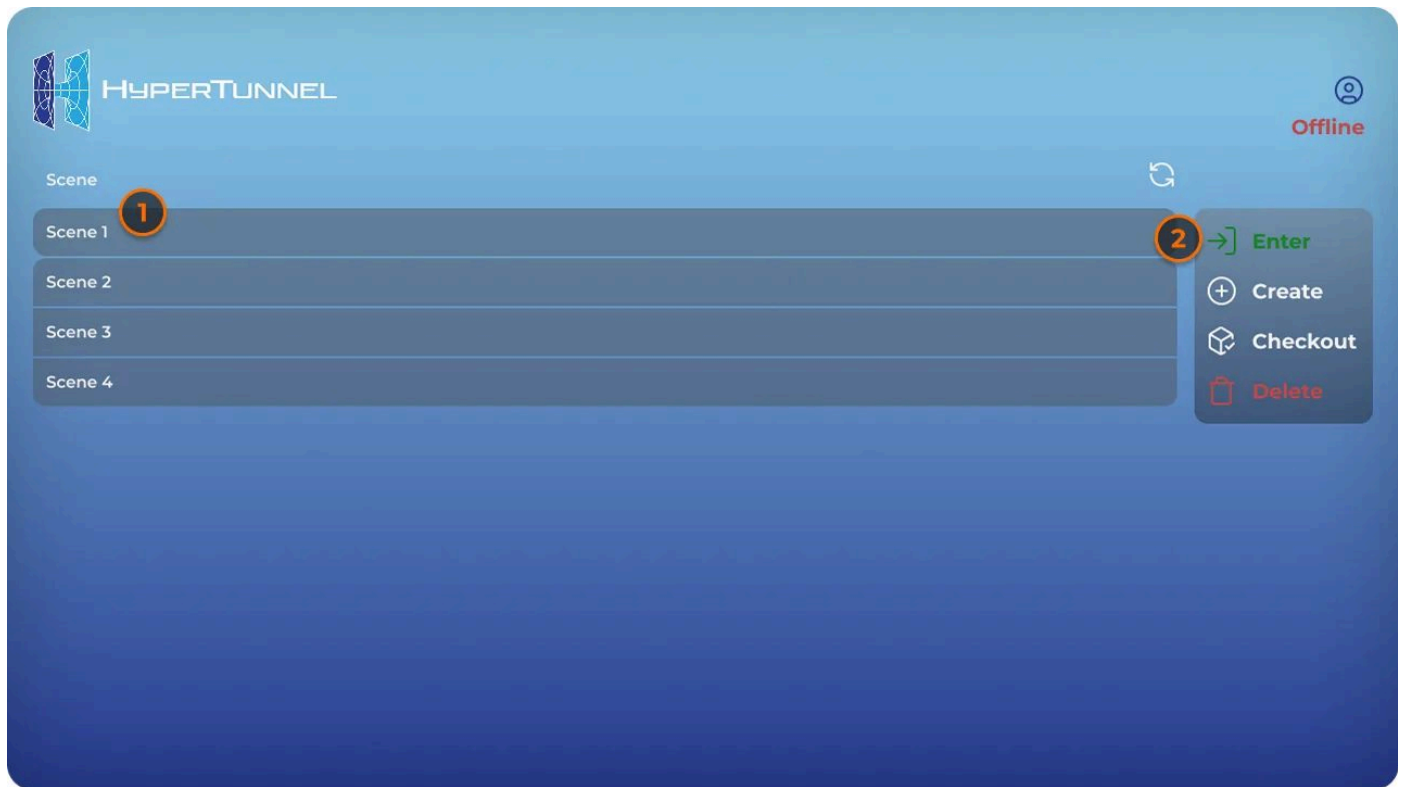
App

iPad & iPhone

Meta Quest

VIVE Focus Vision

1. On the job list, select the job.
2. Tap **Enter**.
3. What happens next depends on your device:
 - **iPad, iPhone:** the **Select Location** panel opens. Choose a location and **AR Enter** or **VR Enter** (see [Location Selection](#)).
 - **Meta Quest, HTC VIVE Focus Vision:** you enter the job's **Homebase** in VR. The menu opens in front of you (see [In a Job](#)).
4. While the job loads, "Waiting to enter job..." may show. **Cancel** returns to the job list.



If HyperTunnel is still processing some of the job's files, the app asks "Some job assets are being processed by the server, do you still want to enter?". You can enter; those files appear when they are ready.

When Enter is greyed out or refused

- **Enter** is greyed out for a job someone else has checked out, and for a job you checked out while you are online: enter that one offline (see [Offline Mode](#)).
- Entry is refused while a HyperNote is being recorded or played, a mesh scan, photo, video or Shelf item is in progress, or the job is being processed. Wait and try again. The message's code is explained in [Troubleshooting](#).

You can also enter a job from the Web Console on an iPhone, iPad or Quest (see [Enter Job from the Web](#)).

Location Selection

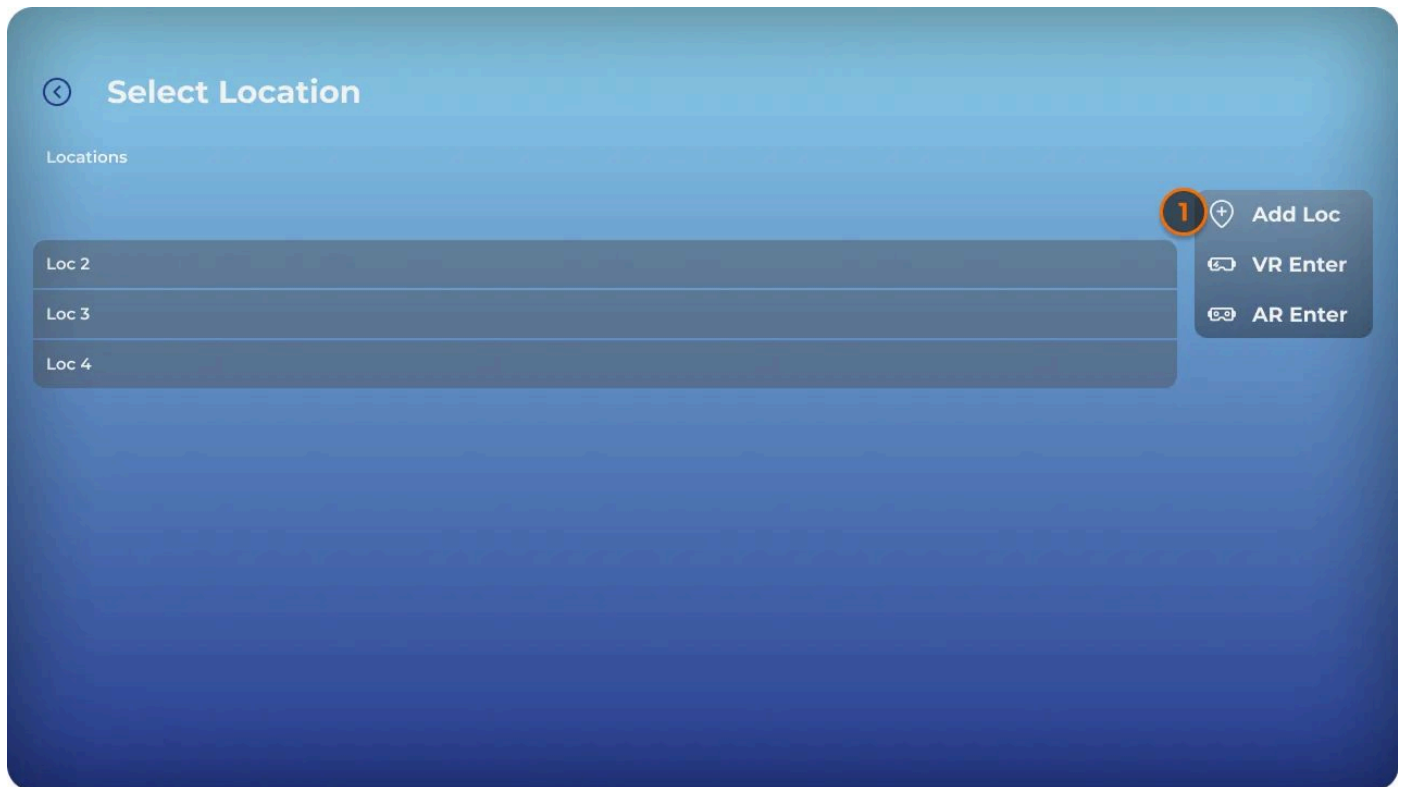
App

iPad & iPhone

AR mode

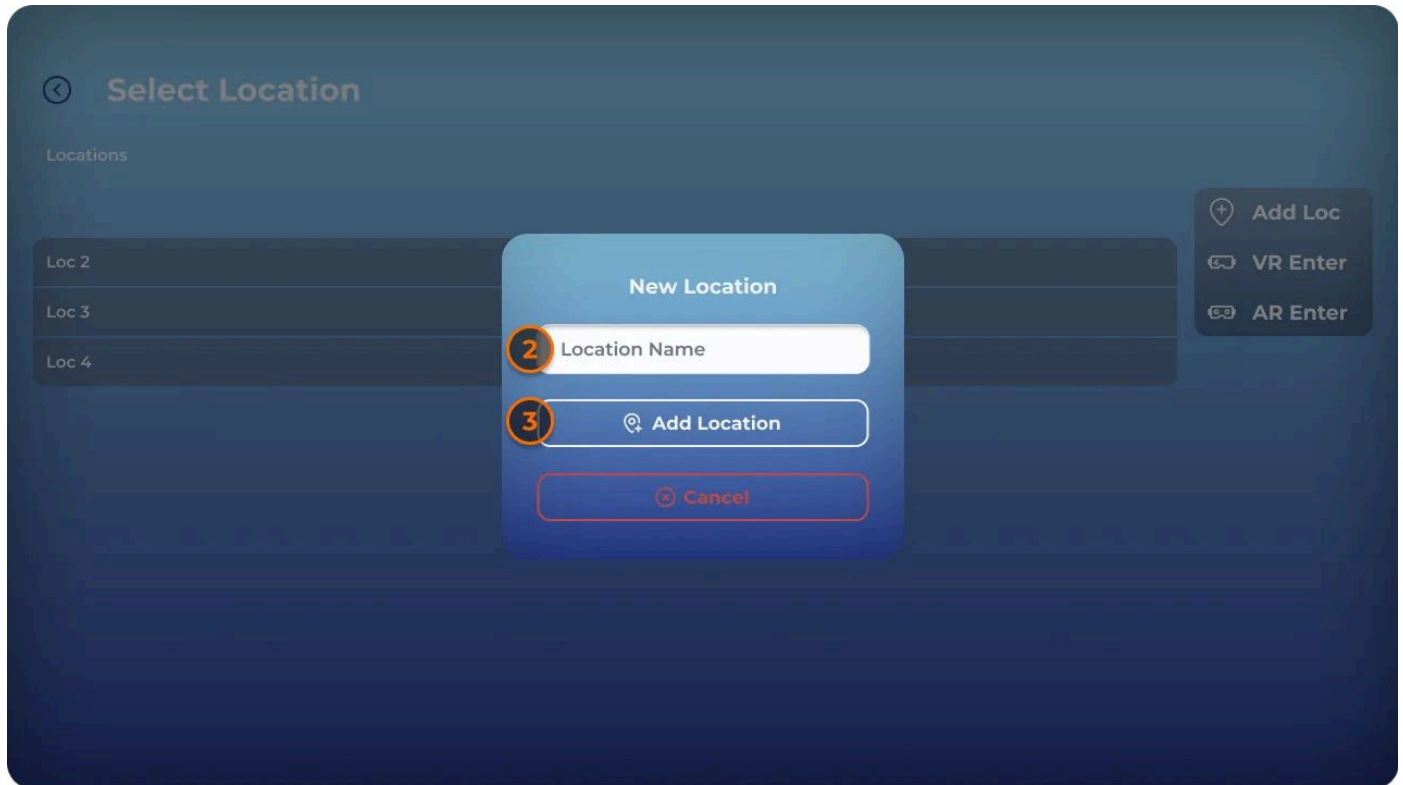
VR mode

On an iPad or iPhone, entering a job opens the **Select Location** panel. It lists the job's **Locations**, including **Homebase**, the job's virtual location.



Enter a location

1. Tap a location.
2. Tap **AR Enter** or **VR Enter**:
 - **VR Enter** works for any location. You see it as a 3D model.
 - **AR Enter** is for a real location, when you are standing there. It is not available for Homebase. The app calibrates to the location first (see [Calibration](#)).



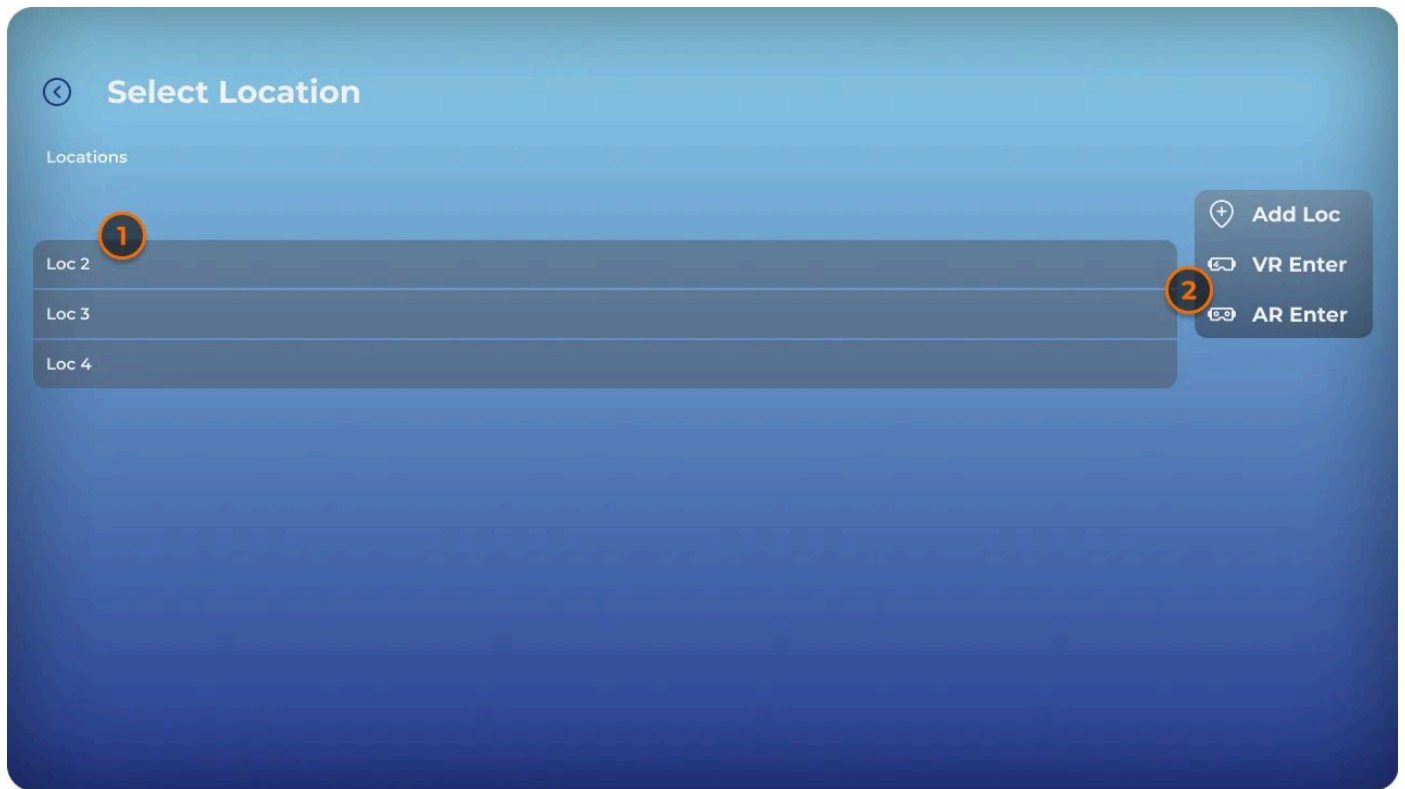
Only one person can be in AR at each location. If someone already is, you see "Maximum AR users reached at the selected location.": enter in VR, or choose another location.

The back arrow returns to the job list.

Add a location

Add a location when you are on site at a place the job does not have yet.

1. Tap **Add Loc**. The **New Location** window opens.
2. Enter a **Location Name**.
3. Tap **Add Location**. The app creates the location and enters it in AR straight away, calibrating the place around you.



The name must not be empty, and must be different from the job's other locations ("Location already exists. Please use a different name").

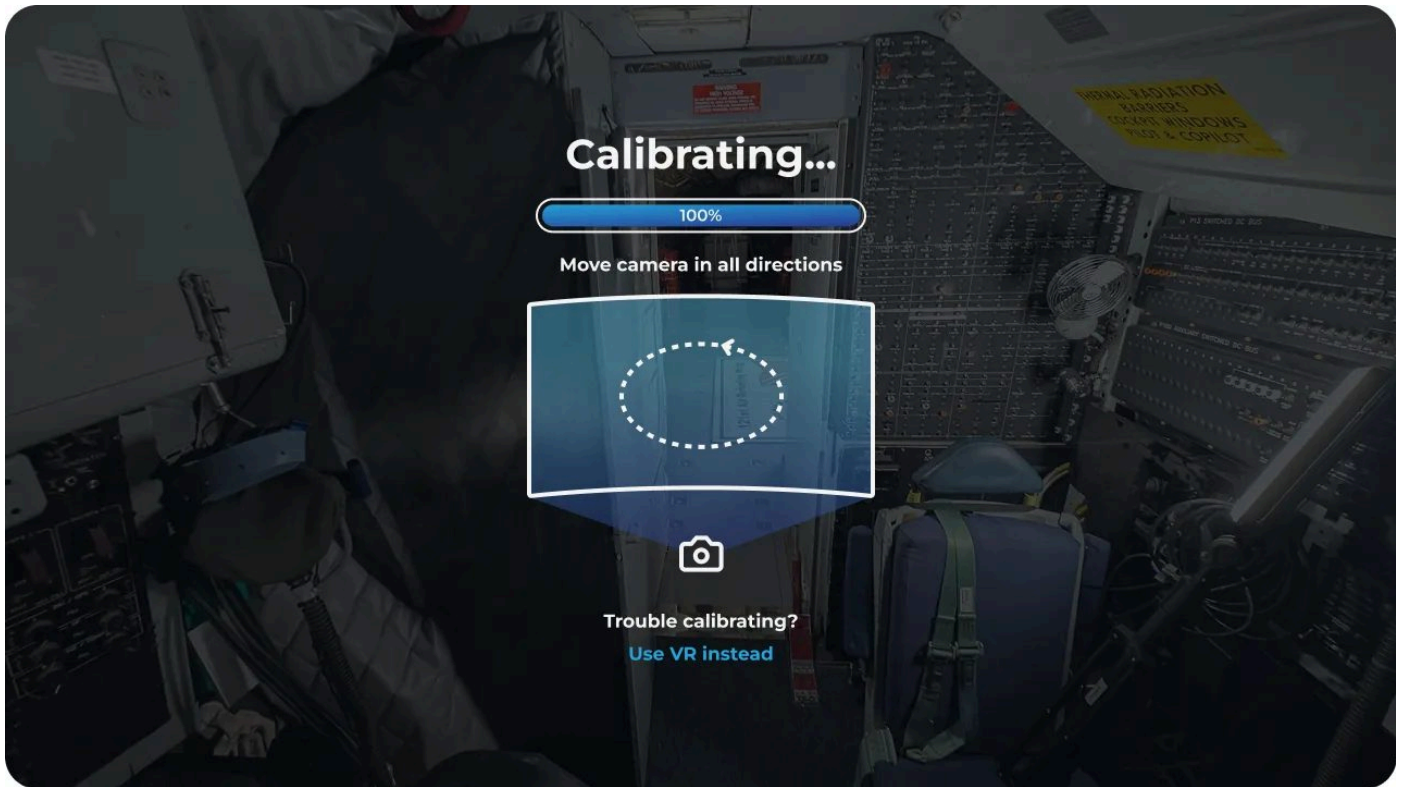
Calibration

App

iPad & iPhone

AR mode

When you enter a location in AR, the app recognises the place around you so that the job's content lines up with the real world. This is calibration.



1. Choose a location and **AR Enter** (see [Location Selection](#)).
2. The window shows "Calibrating..." and "Move camera SLOWLY in all directions".
3. Move your device slowly, pointing at the room's surfaces, until the job opens.

Abort returns to the job list.

Tips

- Move slowly, and point at surfaces with texture and detail. Plain walls and shiny surfaces are hard to recognise.
- Light helps. In a dark place, turn on [Torch Mode](#) before entering.
- Stand roughly where the location was created.

If calibration fails

- **When entering:** entry stops with "Failed to establish calibration with selected location." Try again, or enter in VR instead.
- **When you jump back to your AR location inside a job:** the window offers **Use VR instead**. If calibration fails, the app switches you to VR.

Jumping to any other location is always in VR (see [Jump Locations](#)).

Torch Mode

App

iPad & iPhone

AR mode

Torch mode lights the room with your iPad's or iPhone's torch while you are in AR. Calibration and scanning both work better with light.

1. Before entering the job, open [Lobby Settings](#) (the gear on the job list).
 2. Turn on **Torch**.
 3. Enter the job in AR. The torch comes on when calibration starts and stays on while you are in AR.
- It stays on if you jump to VR inside the job, and turns off when you leave the job.
 - It cannot be changed inside a job: set it before you enter.
 - It is off again each time you open the app.
 - On a device without a torch, the setting shows **(N/A)**.



TIP

In a lit room, prefer the room's lights: the torch makes a moving bright spot and reaches only 1–2 m. In a dark room, use it. iOS may turn the torch off if the device gets hot.

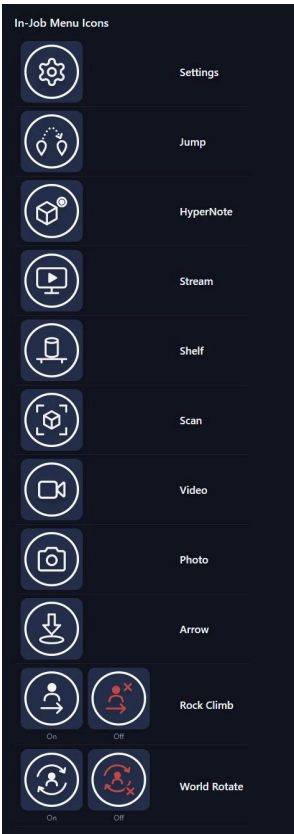
In a Job

- App
- iPad & iPhone
- Meta Quest
- VIVE Focus Vision
- AR mode
- VR mode

See also: [Communication](#) · [HyperNote](#)

Inside a job, the dashboard is your menu. It is a **tab bar** of round buttons. Most buttons open a **tool panel** next to the bar; the minimize button (a short line, top right of the panel) closes it.

The buttons



Button	What it does
Settings (gear)	Sound, camera sharing, stage visibility and Exit (see Settings)
Jump	Move to another location in the job (see Jump Locations)
HyperNote	Record and play spatial messages (see HyperNote)

Button	What it does
Stream	Watch someone's live camera (see Viewing a Live Video Stream)
Shelf	Place files from the job's Shelf (see Spawn from Shelf)
Scan	Scan the room in 3D (see Scan)
Video	Record a video (see Video)
Photo	Take a photo (see Photo)
Arrow	Place an arrow marker (see Arrows)
Rock Climb	Turn grab-to-move on or off (see Rock Climb)
World Rotate	Turn two-handed world rotation on or off (see World Rotate)

Rock Climb and World Rotate are switches: white when on, red with an × when off.

Which buttons you see

Device and mode	Buttons
iPad, AR mode	Settings, Stream, Jump, HyperNote, Video, Photo, Scan
iPad, VR mode	Settings, Stream, Jump, HyperNote, Shelf
iPhone, AR mode	Scan, Photo, Video, HyperNote, Jump, Settings, Stream
iPhone, VR mode	HyperNote, Jump, Settings, Stream, Shelf
Meta Quest, HTC VIVE Focus Vision	HyperNote, Jump, Settings, Rock Climb, World Rotate, Stream, Shelf, Arrow

iPad and iPhone

The bar is always on screen: down the side on an iPad, along the bottom on an iPhone. An iPhone switches between its landscape and portrait layouts as you turn it; an open panel moves with it.





Meta Quest and HTC VIVE Focus Vision

- When you enter a job, the menu opens in front of you by itself.
- Poke the buttons with your index fingertip.
- Pinch the bar and move your hand to move the menu.
- **The wrist button** on your **left** wrist, a watch face with the HyperTunnel logo, brings the menu back in front of you. Pressing it never closes the menu.
- In the lobby, the same button brings the lobby window back in front of you.



Settings

Inside a job, tap or poke **Settings** (the gear) in the menu (see [The buttons](#)). The panel holds, from top to bottom:

Setting	Devices	What it does
Stage Opacity	All	How visible the location's 3D model is (see Stage Opacity)
Cast Video	All	Whether others can see your camera (see Casting a Live Video Feed)
Mute Microphone	All	Stops others hearing you (see Mute Microphone)
Mute Audio	All	Stops you hearing the job (see Mute Audio)
Spatial Audio	Headsets	Makes voices come from where people are, for everyone in the job (see Spatial Audio)

Setting	Devices	What it does
Exit	All	Leaves the job (see Exit Job)



Cast Video is hidden in a job you have checked out, which has no live connection.

Outside a job, the gear on the job list opens a different window: see [Lobby Settings](#).

Stage Opacity

App

iPad & iPhone

Meta Quest

VIVE Focus Vision

AR mode

VR mode

The **stage** is a location's 3D scan. **Stage Opacity** sets how visible it is, from hidden to fully visible. It affects only your view.

1. Open **Settings** (the gear) in the menu.
2. Drag the **Stage Opacity** slider. The stage updates when you let go.



- **In VR mode** the stage starts fully visible: it is what you see of the place.
- **In AR mode** it starts hidden, because you see the real place through the camera. Raise it to compare the scan with the real room.
- It goes back to these starting values when you switch between AR and VR, and when a HyperNote starts playing.
- While you are scanning, your stage is hidden.

Mute Audio

App

iPad & iPhone

Meta Quest

VIVE Focus Vision

AR mode

VR mode

Mute Audio stops you hearing anything from the job: other people's voices, videos and audio. It affects only your device.

1. Open **Settings** (the gear) in the menu.
2. Turn on **Mute Audio**. Turn it off to hear again.



Others can still hear you. To stop that, use [Mute Microphone](#).

Mute Microphone

App

iPad & iPhone

Meta Quest

VIVE Focus Vision

AR mode

VR mode

Mute Microphone stops others in the job from hearing you. You still hear them.

1. Open **Settings** (the gear) in the menu.
2. Turn on **Mute Microphone**. Turn it off to be heard again.



While your microphone is muted, a HyperNote records you without sound (see [HyperNote](#)).

Exit Job

App

iPad & iPhone

Meta Quest

VIVE Focus Vision

AR mode

VR mode

1. Open **Settings** (the gear) in the menu.
2. Tap or poke **Exit**.



You return to the job list. There is no confirmation.

- **iPad, iPhone:** the app first finishes anything still uploading, such as a scan or photo ("Finishing background tasks before exiting..."), then "Exiting Job...". The torch, if on, turns off.
- **Meta Quest, HTC VIVE Focus Vision:** you return straight to the job list, and the lobby is see-through again.

Moving Around

- App
- Meta Quest
- VIVE Focus Vision
- iPad & iPhone
- VR mode
- AR mode

iPad and iPhone

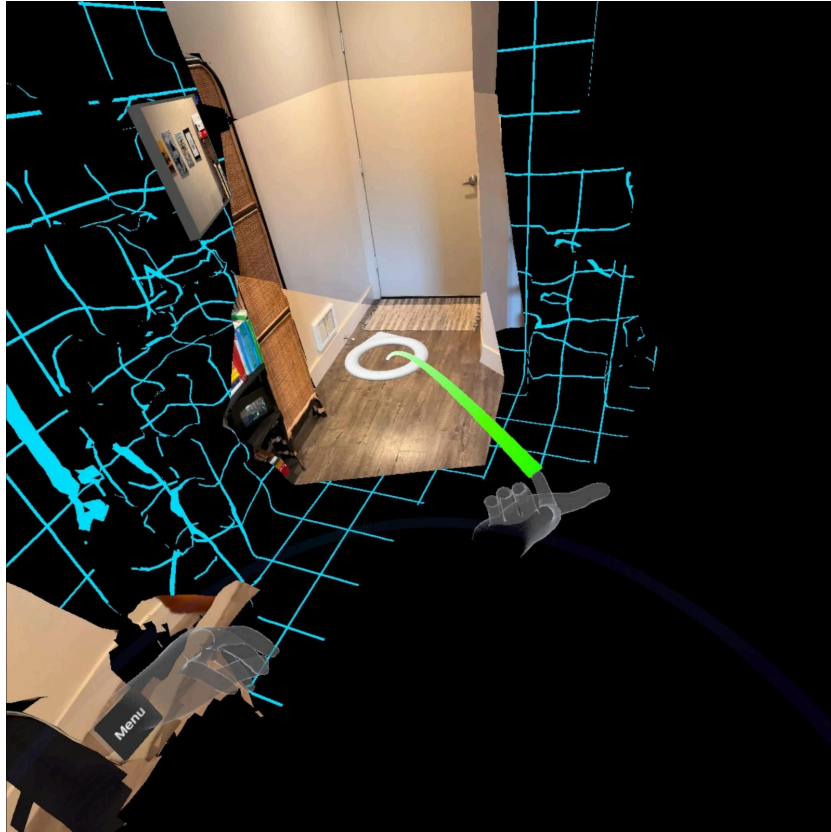
You move by moving the device: walk, and turn the device to look around. This works in AR mode and in VR mode. There are no on-screen controls for moving. To go to another location, use [Jump](#).

Meta Quest and HTC VIVE Focus Vision

Headsets are used with your hands; controllers are not supported.

Way to move	How	More
Walk	Walk in your play space	—
Teleport	Right hand: finger gun, tuck your thumb, release	Teleport
Rock Climb	Pinch empty space with one hand and pull	Rock Climb
World Rotate	Pinch empty space with both hands and turn	World Rotate
Jump	Choose another location from the menu	Jump Locations

Rock Climb is on when you enter a job; **World Rotate** is off. Both go back to that when you leave the job.



Teleport

App

Meta Quest

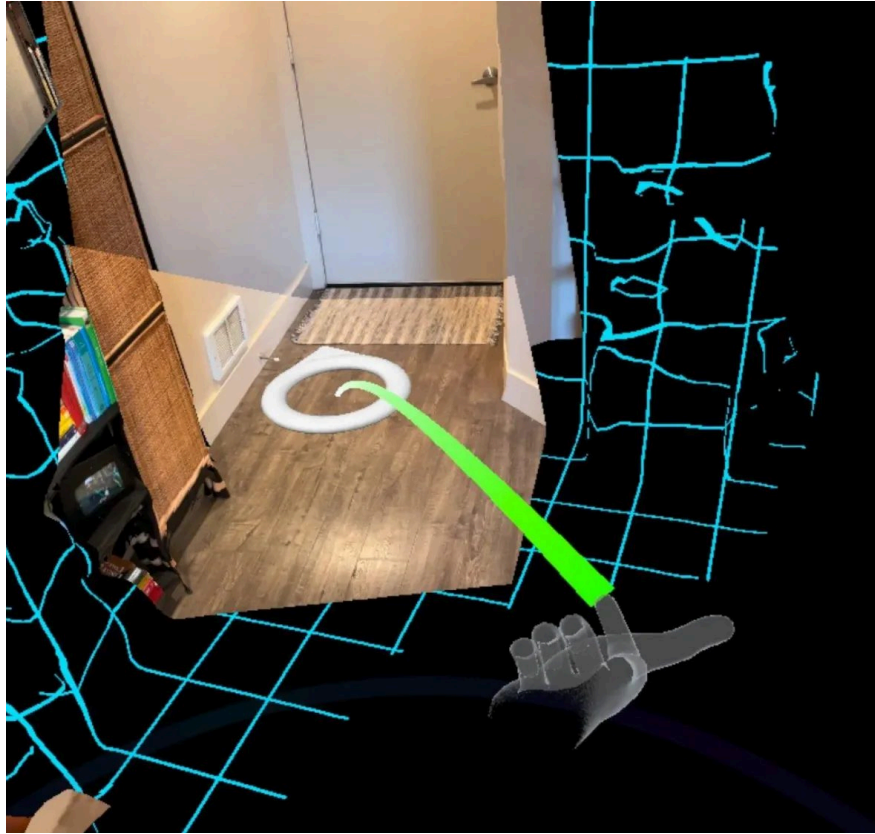
VIVE Focus Vision

VR mode

Teleport moves you to a spot on the floor. It uses your **right hand**.

1. Hold your right hand **palm up**, with your index finger and thumb out and your other fingers curled, like a finger gun. A curved ray comes from your hand to a ring on the floor.
2. Aim the ring where you want to go. You can turn your hand; the ray stays on.
3. **Tuck your thumb** against your index finger. The target locks: it stops following your hand.
4. **Release your thumb**. You move to the target, facing the way the arrow on the ring points.

To aim again, relax your hand and make the finger gun again.



- **To cancel**, curl your index finger, lower your hand, or move it out of view.
- You cannot teleport onto walls or steep surfaces.
- Poking the menu with your fingertip never starts a teleport.



TIP

If the ray stays on when you do not want it, turn your palm up or drop your hand.

Rock Climb

App

Meta Quest

VIVE Focus Vision

VR mode

Rock Climb lets you pull yourself through the job, as if climbing. It is a switch in the menu, **on** when you enter a job.

1. Pinch your thumb and index finger in empty space, away from any object or panel.
2. Pull your hand. You move the opposite way, in any direction, including up and down.
3. Let go to stop.



- To turn it off, poke **Rock Climb** in the menu. The button turns red with an ×. Turn it off if you keep moving by accident.
- A pinch on an object grabs the object instead. A pinch that started for climbing cannot pick up objects.
- With [World Rotate](#) on, a two-handed pinch also turns the world.
- Rock Climb is on again the next time you enter a job.

World Rotate

App

Meta Quest

VIVE Focus Vision

VR mode

World Rotate lets you turn the job around you without turning your body. It is a switch in the menu, **off** when you enter a job.

1. Poke **World Rotate** in the menu to turn it on. The button turns white.
2. Pinch in empty space with **both** hands.
3. Move your hands around each other. The world turns around you, level with the floor.
4. Let go to stop.



- World Rotate works whether [Rock Climb](#) is on or off. With Rock Climb on, the same two-handed pinch also moves you.
- World Rotate is off again the next time you enter a job.

Jump Locations

App

iPad & iPhone

Meta Quest

VIVE Focus Vision

AR mode

VR mode

A job can have several locations. **Jump** takes you to another one.

1. Open **Jump** in the menu. The panel title shows your current location.
2. Choose a location from the list. It includes **Homebase**, the job's virtual location.

3. Press the jump button (an arrow). The location loads, and you arrive.



Where you arrive

- If you have been to that location before, you return to where you were.
- On your first visit, if someone is there in AR, you arrive about 3 m behind them. Otherwise you arrive at the location's starting point.
- On a headset, an object you are holding comes with you.

iPad and iPhone: AR and VR

You are in AR only at the location where you entered the job in AR. Every other location, including Homebase, is VR. Jumping back to your AR location returns you to AR; the app calibrates again (see [Calibration](#)).

HyperNotes recorded elsewhere

When you play a HyperNote recorded at another location, the app asks "Jump to location ... to play HyperNote?". Confirm to jump there and play it (see [HyperNote](#)).

Objects

- App
- iPad & iPhone
- Meta Quest
- VIVE Focus Vision
- AR mode
- VR mode

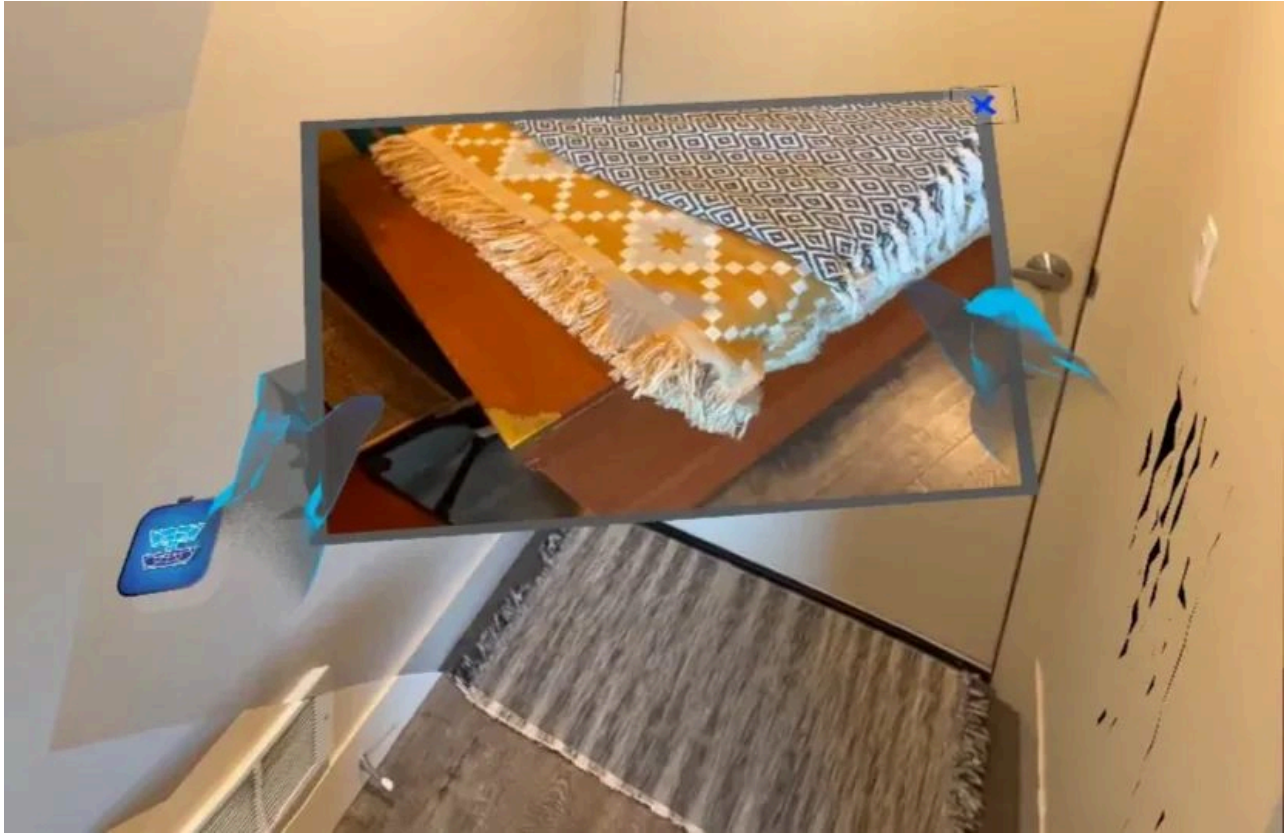
See also: [Assets](#)

Job objects are the files and markers placed in a job. Everyone in the job sees them, and anyone can move, scale or delete them (see [Interactions](#)). They stay in the job until someone deletes them.

Object	How it gets into the job	What you can do
3D model	From the Shelf	Tap it to switch between its views, such as mesh and point cloud
Image	From the Shelf, or with Photo	Move, scale, delete
Video	From the Shelf, or with Video	Tap to play or stop , for everyone
Audio	From the Shelf	Tap to play or stop, for everyone. Cannot be scaled
PDF	From the Shelf	Turn pages and zoom, for everyone (see PDF Viewer)
Video monitor	From Stream	Shows someone's live camera (see Viewing a Live Video Stream)
Arrow	From the Arrow button on a headset	Point at something (see Arrows)

The **Shelf** holds the files registered to the job in the Web Console, and every photo and video taken in it (see [Spawn from Shelf](#)).

A job can also have an **environment**, a 3D model or Gaussian splat set in the Web Console, around you. It is not an object: it cannot be grabbed.



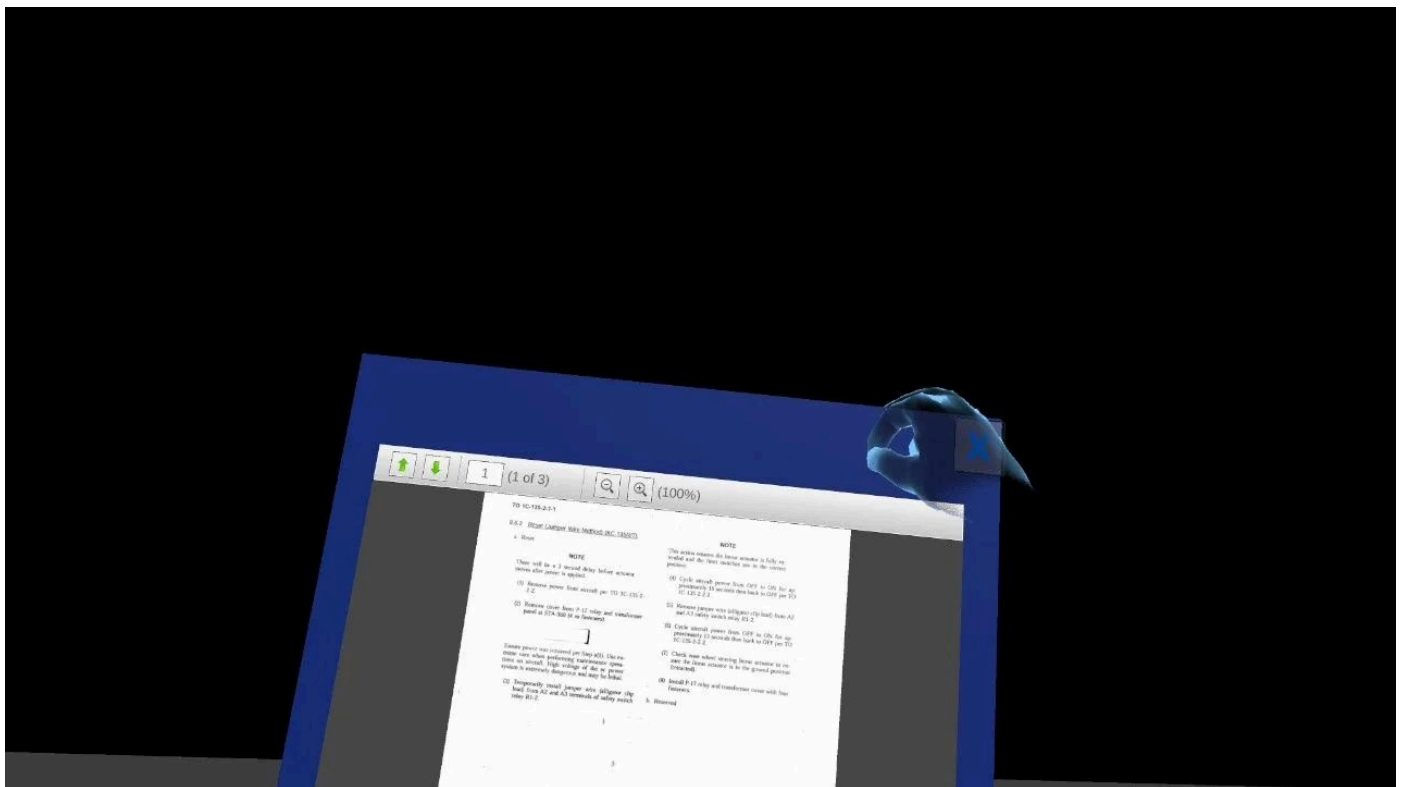
Interactions

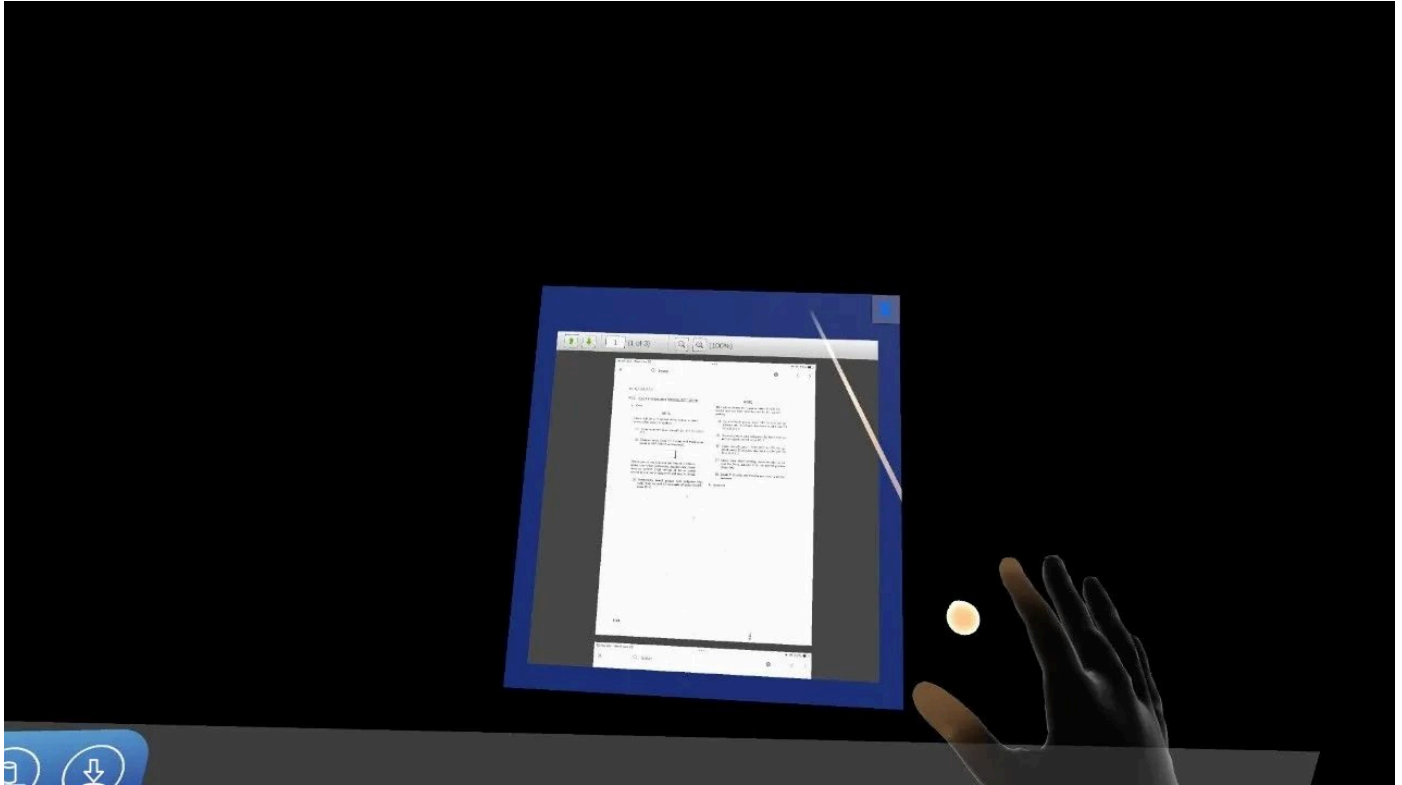
Anyone in the job can move, scale and rotate objects. Everyone sees the change.

Meta Quest and HTC VIVE Focus Vision

Headsets are used with your hands; controllers are not supported.

- **Grab close up:** touch the object and pinch your thumb and index finger. Move your hand, then let go.
- **Grab from a distance:** each hand casts a ray. Point it at the object and pinch to grab. Push or pull your hand to move the object farther or closer.
- **Scale and rotate:** grab the object with both hands, then spread or close your hands to scale it, and turn them to rotate it.
- **Tap:** a quick pinch. It plays or stops a video or audio, and changes how a 3D model is shown.
- **Buttons and panels:** poke them with your index fingertip.





A pinch that starts in empty space moves you instead, when Rock Climb is on (see [Moving Around](#)).

iPad and iPhone

- **Tap** an object to play or stop a video, or change how a 3D model is shown.
- **Touch and hold** an object, then drag it with one finger.
- With a **second finger**, pinch to scale it and twist to rotate it.

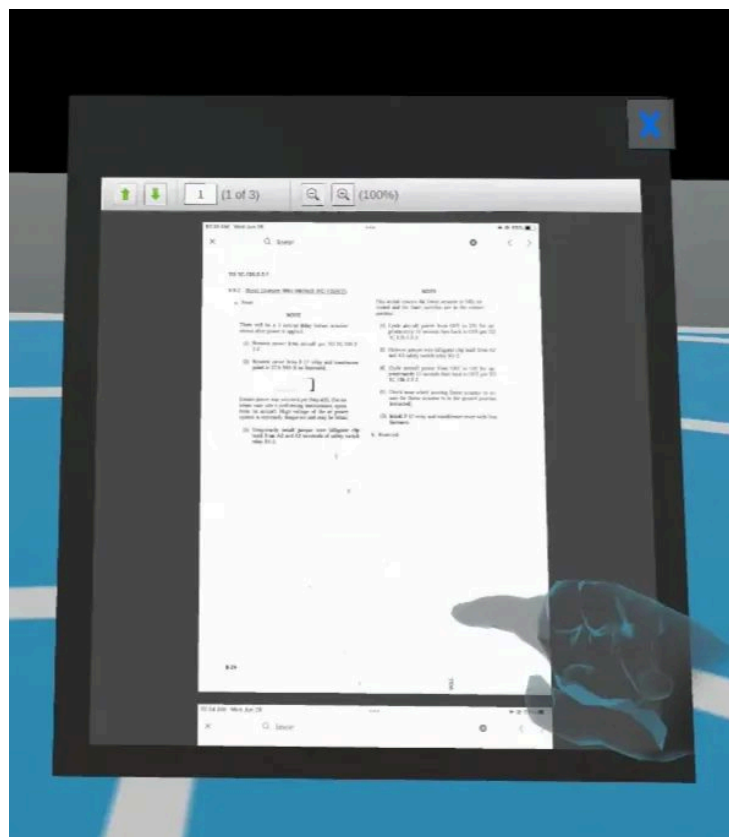
Objects that cannot be scaled

Audio objects, HyperNotes and scanned meshes keep their size. You can still move them.

Deleting an object

- Tap or poke the ✕ at the top right of an image, video, audio, PDF, arrow or video monitor, or
- shrink the object until it turns red, then let go (see [Scale to Delete](#)).

Either way the object is **deleted for everyone**. A deleted file stays on the Shelf, so you can place it again.



Scale to Delete

App

iPad & iPhone

Meta Quest

VIVE Focus Vision

AR mode

VR mode

Shrink an object until it turns red, then let go, and it is deleted.

Meta Quest and HTC VIVE Focus Vision

1. Grab the object with both hands.
2. Bring your hands together. When the object is small enough, it **turns red**.
3. Let go with both hands. The object is deleted.

iPad and iPhone

1. Pinch the object smaller with two fingers until it **turns red**.
2. Lift your fingers. The object is deleted.

WARNING

The object is deleted **for everyone** in the job, and it cannot be undone. A file from the Shelf stays on the Shelf, so you can place it again.

- **Changed your mind?** Make the object bigger again before you let go. The red goes away and nothing is deleted.
- An object turns red at about one fifth of its original size for arrows and 3D models, and about 15% for images, videos, PDFs and video monitors.
- Only shrinking deletes. Moving an object that is already small does not.
- Audio objects, HyperNotes and scanned meshes cannot be scaled, so they cannot be deleted this way. Images, videos, audio, PDFs, arrows and video monitors can also be deleted with their ✕.
- Only you see the red; others see the object disappear when you let go.

Spawn from Shelf

App

iPad & iPhone

Meta Quest

VIVE Focus Vision

VR mode

The **Shelf** holds the job's files: those registered in the Web Console as Shelf Objects (see [Upload Assets](#)), and every photo and video taken in the job. **Spawn** places one in the job.

The Shelf is on headsets, and on iPad and iPhone in **VR mode**. It is not in AR mode.

1. Open **Shelf** in the menu.
2. Select a file. The **Type** column shows its kind.
3. Press the spawn button. The object appears in front of you, at its original size.



- The spawn button is greyed out until the selected file has downloaded to your device.
- While a HyperNote is playing or being saved, or someone else is spawning, spawning is refused: you hear an error sound and nothing appears. Try again shortly.
- Spawned objects are like any other: everyone sees them, and anyone can move or delete them. Deleting one leaves the file on the Shelf.

Photo

App

iPad & iPhone

AR mode

On site, in AR mode, take a photo of what you see. It appears in the job for everyone, and is added to the job's Shelf.

1. Point your iPad or iPhone at what you want to show.
2. Tap **Photo** in the menu. The photo is taken at once; there is no panel.
3. The photo appears in front of you, sized to fit before the nearest wall. Others see it straight away.



Photos are named "Image", "Image (1)", "Image (2)" and so on. Like other objects, anyone can move, scale or delete them. A deleted photo stays on the Shelf.

Photo is not available in VR mode or on headsets.

Video

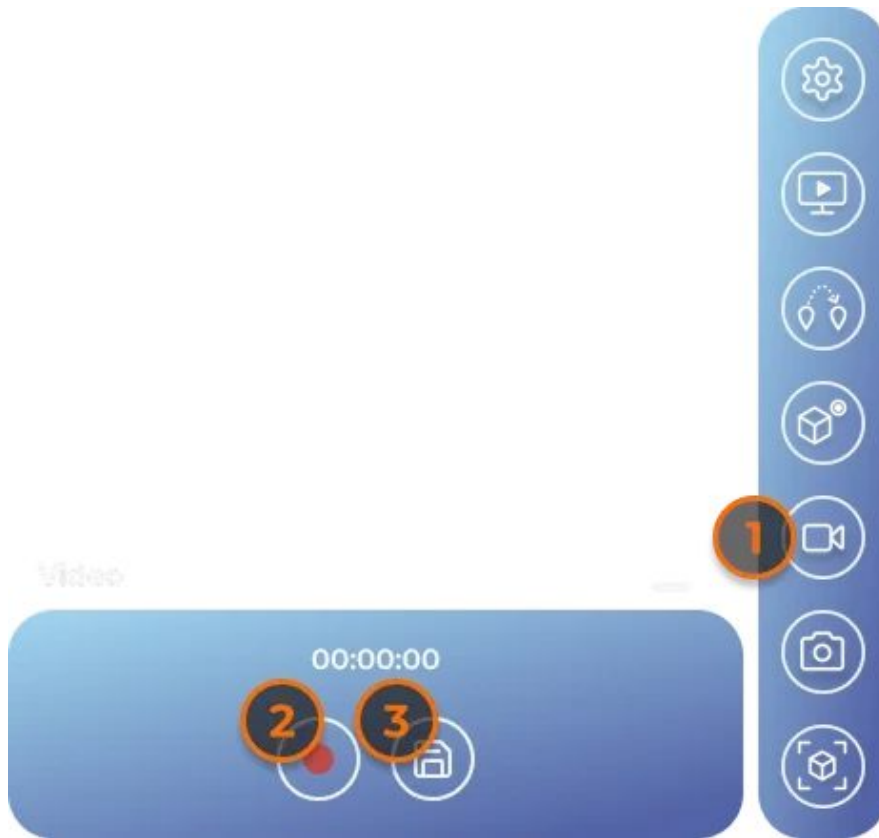
App

iPad & iPhone

AR mode

On site, in AR mode, record a video of what you see, with sound. It appears in the job for everyone, and is added to the job's Shelf.

1. Tap **Video** in the menu. The panel shows a timer.
2. Tap the record button (red dot) to start.
3. Tap the save button (disk) to stop and save.
4. The video appears in front of you. Tap it to play or stop it, for everyone.



- The video keeps the orientation, portrait or landscape, that you started in.
- Only one person can record a video in a job at a time. If someone else is recording, you hear an error sound: wait and try again.
- Videos are named "Video", "Video (1)" and so on. Like other objects, anyone can move, scale or delete them. A deleted video stays on the Shelf.

Video is not available in VR mode or on headsets.

PDF Viewer

App

iPad & iPhone

Meta Quest

VIVE Focus Vision

VR mode

A PDF in a job is a document everyone reads together. When someone turns the page or zooms, everyone sees it.

Place a PDF

PDFs come from the job's Shelf. Register them in the Web Console first (see [Upload Assets](#)).

1. Open **Shelf** in the menu (on a headset, or an iPad or iPhone in VR mode).
2. Select a PDF; its **Type** is PDF.

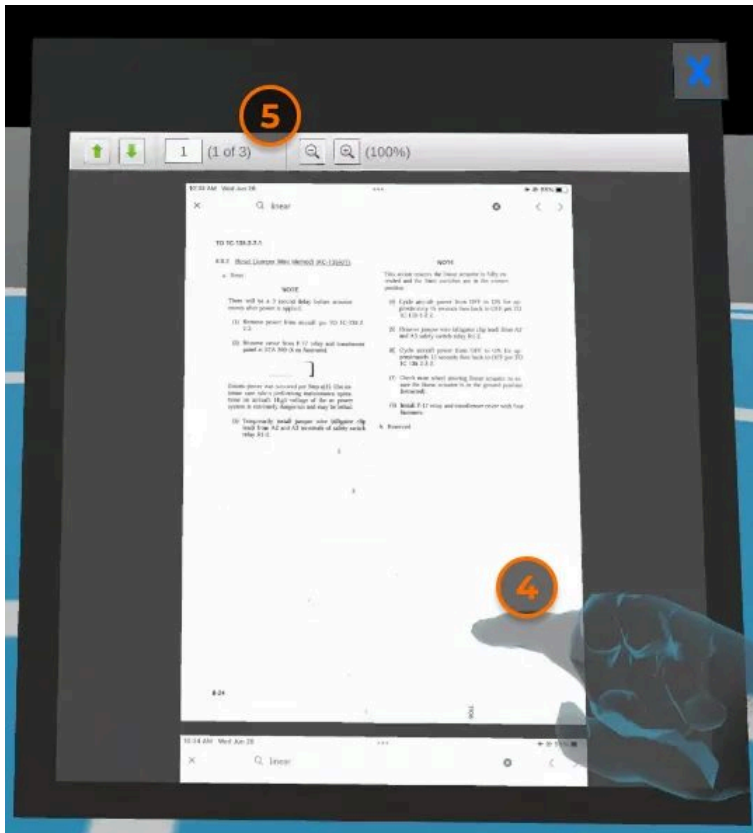
3. Press the spawn button.



Read it

The toolbar on the PDF has:

- page up and page down, and the page number ("n of N");
- zoom out and zoom in, and the zoom level.



Move and scale the PDF like any other object (see [Interactions](#)). Its × deletes it for everyone; the file stays on the Shelf.

Arrows

App

Meta Quest

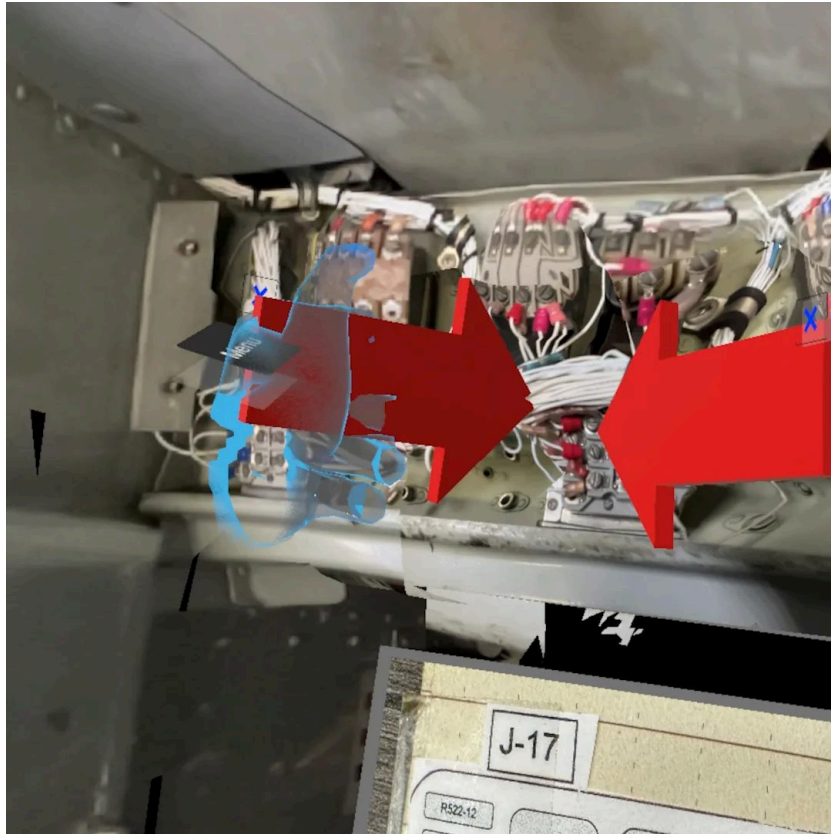
VIVE Focus Vision

VR mode

Arrows point others to something in the job, such as a part to check.

1. Poke **Arrow** in the menu. A red arrow appears in front of you.
2. Grab it and put it where you want it. Turn it to point the right way.
3. Poke **Arrow** again for more arrows.





- Everyone in the job sees the arrows, including iPad and iPhone users, who can move them too.
- Arrows stay in the job, and are recorded in HyperNotes.
- To remove an arrow, poke its ✕, or shrink it until it turns red and let go (see [Scale to Delete](#)).

Placing arrows is available on headsets only.

Communication

App

iPad & iPhone

Meta Quest

VIVE Focus Vision

AR mode

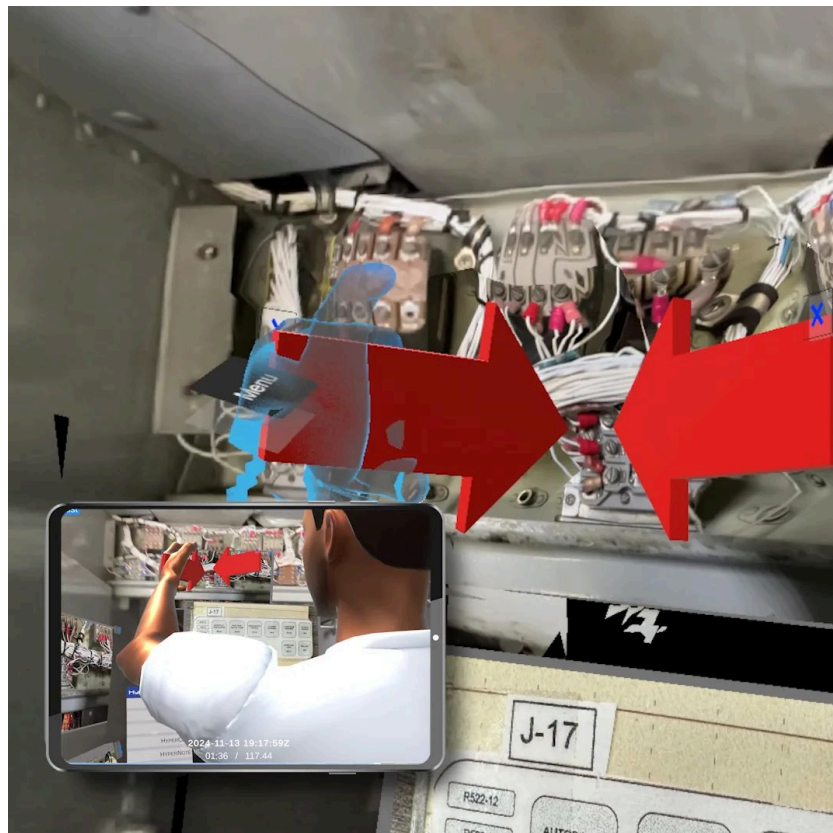
VR mode

See also: [In a Job](#)

Live, together

When people are in the same job at the same time, they can:

- **Talk.** Voice is on for everyone in the job (see [HyperCall](#)).
- **See each other.** Everyone appears as an avatar (see [Avatars](#)).
- **See each other's view.** Everyone shares their camera when they enter (see [Casting a Live Video Feed](#)). Others can watch it on a video monitor (see [Viewing a Live Video Stream](#)).



Live voice and video need a connection: they are not available in a job you have checked out and entered offline.

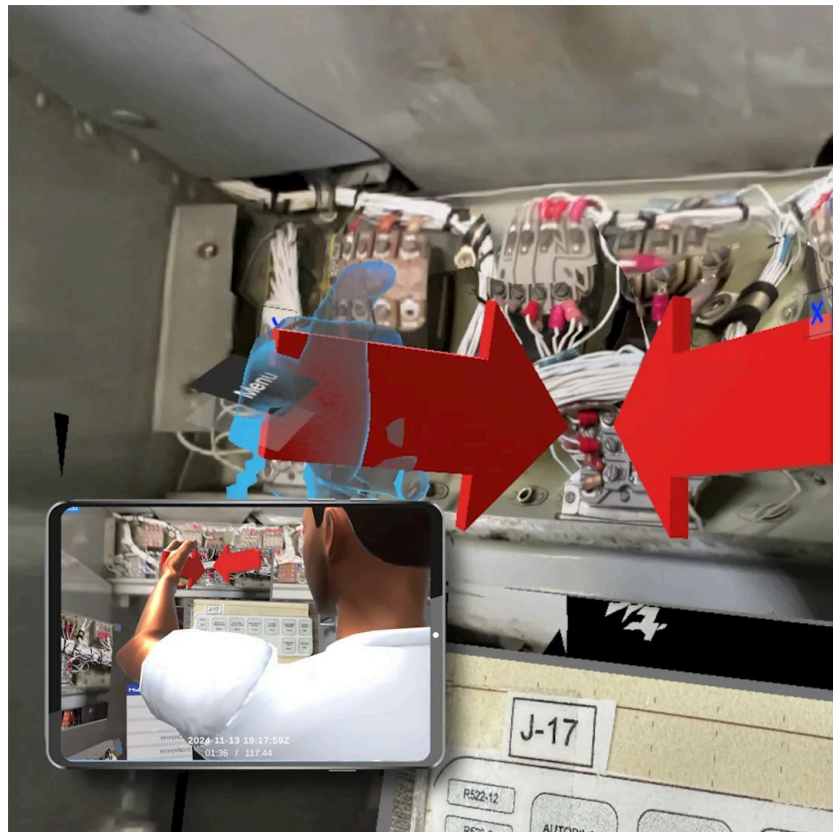
At different times

A **HyperNote** records what happens in the job, in 3D: who was there, where they moved, what they said and showed, and what changed. Others play it back later, in the job, and can walk around it (see [HyperNote](#)).

HyperCall

[App](#)[iPad & iPhone](#)[Meta Quest](#)[VIVE Focus Vision](#)[AR mode](#)[VR mode](#)

HyperCall is the voice connection in a job. When you enter a job online, you can talk with everyone in it. There is nothing to start.



- To stop others hearing you, use [Mute Microphone](#).
- To stop hearing others, use [Mute Audio](#).
- On a headset, [Spatial Audio](#) makes voices come from where people are.

HyperCall needs a connection. It is not available in a job you have checked out and entered offline.

If your voice connection cannot start when you enter, entry fails with a code starting with V (see [Troubleshooting](#)).

Casting a Live Video Feed

App

iPad & iPhone

Meta Quest

VIVE Focus Vision

AR mode

VR mode

When you enter a job online, your view is shared ("cast") so that others can watch it. They see it on a video monitor (see [Viewing a Live Video Stream](#)).

- On an iPad or iPhone, others see your camera: in AR mode, the real place you are looking at.
- On a headset, others see what you see in the job.

Turn it off or on

1. Open **Settings** (the gear) in the menu.
2. Turn **Cast Video** off to stop sharing your view, or on to share it again.



- **Cast Video** is hidden in a job you have checked out, which has no live connection.
- While a HyperNote is recording, turning casting off leaves your part of the recording black for that time.

Viewing a Live Video Stream

App

iPad & iPhone

Meta Quest

VIVE Focus Vision

AR mode

VR mode

Watch what someone else in the job is seeing: for example, the camera of a colleague on site with an iPad.

1. Open **Stream** in the menu. **Available Streams** lists the people sharing their view.
2. Select a name.
3. Press the watch button. A video monitor showing their view appears in front of you.



The video monitor

- It is a [Job Object](#): everyone sees it, and anyone can move or scale it.
- Tap it to show its options: the person's name, a **Zoom** slider, and an ✕ that removes the monitor for everyone.
- It turns tall when an iPad or iPhone user holds their device in portrait.
- Live monitors have a blue frame.

You can also remove a monitor by shrinking it until it turns red (see [Scale to Delete](#)).

During a HyperNote

While a HyperNote is playing, **Stream** lists the people recorded in it instead. Watching one adds a monitor showing what they saw during the recording, in step with playback. These monitors have a purple frame, and are **saved with the HyperNote**: they come back each time it plays (see [HyperNote](#)).

Live streams need a connection; the list is empty in a job you have checked out and entered offline.

Spatial Audio

App

Meta Quest

VIVE Focus Vision

VR mode

With **Spatial Audio** on, voices and sounds come from where people and objects are in the job, and get quieter with distance. With it off, everyone sounds the same wherever they are.

1. On a headset, open **Settings** (the gear) in the menu.
2. Turn **Spatial Audio** on or off.



i NOTE

Spatial Audio is a setting for the **whole job**: turning it on or off changes it for everyone in the job. It is off to start with.

The setting appears only on headsets.

HyperNote

[App](#)[iPad & iPhone](#)[Meta Quest](#)[VIVE Focus Vision](#)[AR mode](#)[VR mode](#)

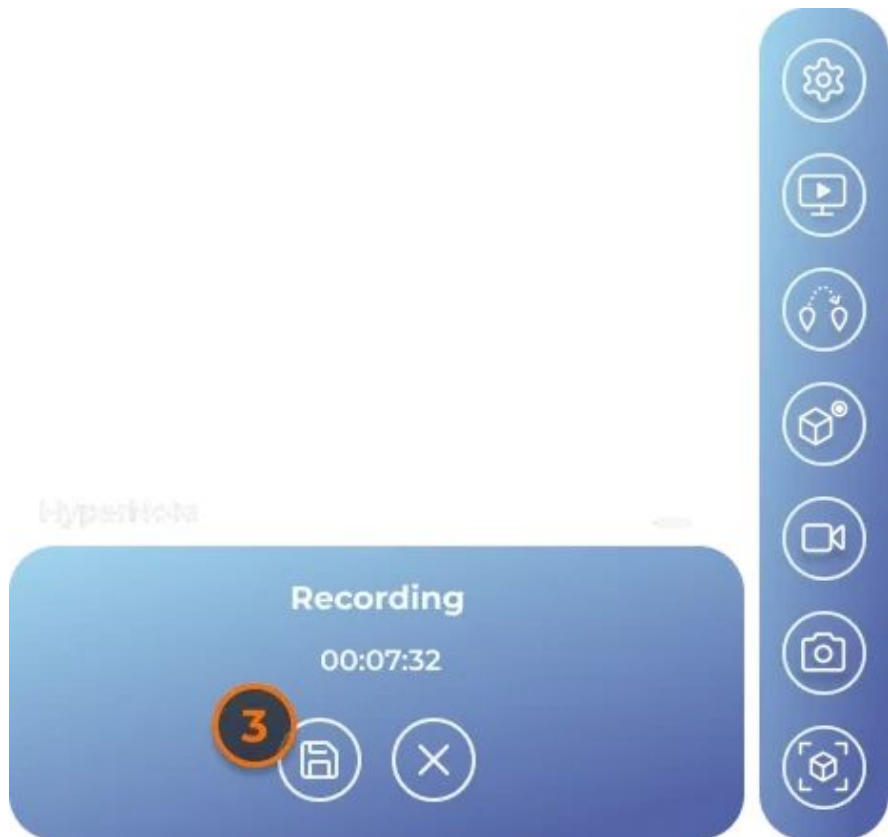
See also: [Communication](#) · [In a Job](#)

A HyperNote is a recording of a job in 3D. It captures everyone in the job: where they moved, what they said, what their cameras showed, and the objects they added, moved or deleted. Anyone can play it back later in the same job, and walk around inside it.

Open **HyperNote** in the menu. The panel lists the job's HyperNotes, newest first, with the location each was recorded at and who recorded it.

Record

1. Press the record button (red dot).
2. Online, the panel shows "Pending Server Response" while everyone's recording starts. This usually takes a few seconds; with several people, up to about 30. **Cancel** stops it before it starts.
3. Recording starts: the panel shows **New HyperNote Recording** and a timer. Show and explain what you need to.
4. Press the save button (disk) to stop. "Saving recording..." shows, then the list.



NOTE

Once recording has started there is no Cancel: save it, then delete it if you do not want it.

- The HyperNote appears in the list when it has been processed. It is named with the date and a number, such as `26285-01`. To rename it, use the Web Console (see [Manage Job](#)).
- If someone's video or sound could not be collected, you see "HyperNote saved, but some participant video or audio is missing."
- In a job you have checked out and entered offline, recording starts at once, and records only you: your camera and your voice.

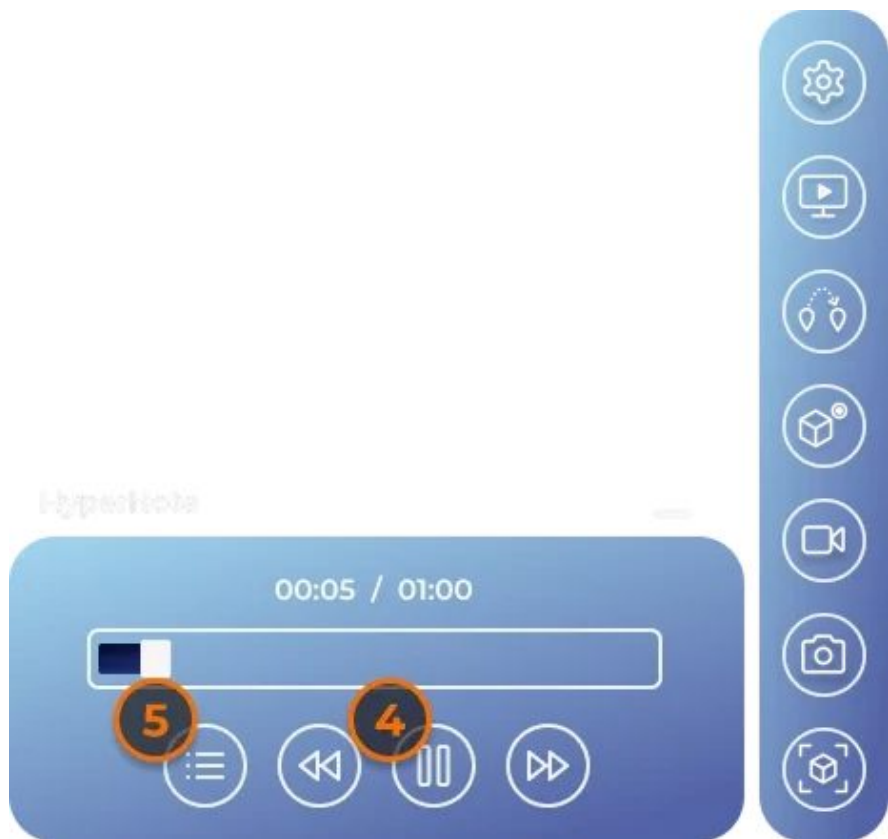
Play

1. Select a HyperNote and press the play button.
2. If it was recorded at another location, the app asks "Jump to location ... to play HyperNote?". Confirm to go there (see [Jump Locations](#)).
3. The job is replaced by the recording, **for everyone in the job**. You can walk around while it plays.



The playback bar has, from left to right: back to the list (stops playback for everyone), back 2 seconds, play and pause, and forward 2 seconds. Drag the slider to move through the recording. Anyone in the job

can control playback.



While a HyperNote plays, you can open **Stream** and watch what one of the recorded people saw. The video monitor you add is saved with the HyperNote (see [Viewing a Live Video Stream](#)).

Delete

1. Select a HyperNote and press the delete button (bin).
2. Confirm.



Deleting cannot be undone.

One at a time

A job can have only one HyperNote recording or playing at a time. Meanwhile nobody else can enter the job ("A HyperNote is currently being recorded. Please try again later."), and some actions, such as spawning from the Shelf, are refused with an error sound.

Scanning

App

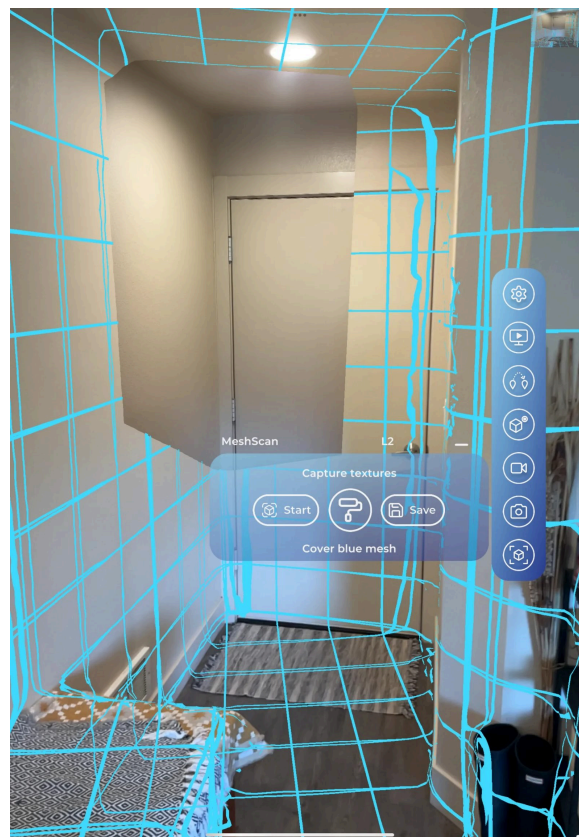
iPad & iPhone

AR mode

See also: [Entering a Job](#)

A scan turns a real place into a textured 3D model of it, a **digital twin**. Remote users then see the place as it really is, and people on site can compare the model with the room.

- Scan with an **iPad or iPhone in AR mode**, at a location you entered on site. The device needs a LiDAR scanner (iPad Pro, iPhone Pro).
- After you save, HyperTunnel processes ("bakes") the scan into a textured model. It evens out color and brightness between photos, and brightens scans taken in low light. A Business Admin can change these options in the Web Console (see [Business Settings](#)).
- **Scanning again replaces** the location's earlier scan.
- Scans can be downloaded from the Web Console (see [Assets](#)).



The steps and tips are in [Scan](#). In a dark place, use [Torch Mode](#).

Scan

App

iPad & iPhone

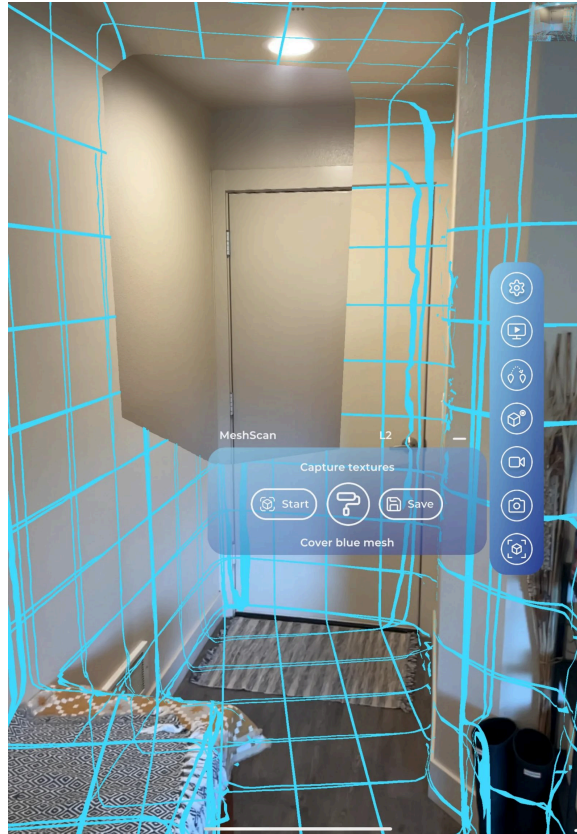
AR mode

Scan the location you are at, with an iPad or iPhone that has LiDAR, in AR mode.

Steps

1. Enter the location in AR (see [Location Selection](#)). In a dark place, turn on [Torch Mode](#) before entering.
2. Open **Scan** in the menu. The panel shows **Start**, a texture button and **Save**.
3. Tap **Start**. The location's earlier scan is hidden, and a blue mesh grows over the surfaces as you move.
4. Move around slowly until the blue mesh covers what you need ("Cover blue mesh"). Surfaces fill in once they have been seen from several directions.
5. Optional: point at something important and tap the texture button (paint roller) to take a high-quality snapshot of it. The app takes pictures by itself as you move; a snapshot you take is used first where it covers a surface.
6. Tap **Save**. "Mesh Scan will be saving in the background" shows, and you can carry on working. A chime plays when the upload finishes.





After you save

HyperTunnel processes the scan into a textured model. A plain version of the scan appears first; the textured one replaces it when processing finishes.

- The new scan **replaces** the location's earlier one. Anything you did not scan again is not kept.
- Closing the Scan panel, or switching to another tool, while scanning saves the scan.
- Only one person can scan in a job at a time. Meanwhile, nobody else can enter the job.

Tips for a good scan

- Walk the room's edge, then walk it again on a different line.
- Stay about 0.5–3 m from what you want textured. Beyond about 4 m, surfaces are not captured.
- Face the surfaces. A surface seen from the side is not captured.
- Slow down at details. Moving faster does not capture more.
- Look **at** floors and ceilings: walking over a floor does not capture it.
- Do not go from a bright area to a dark one during one scan. Brightness is fixed when you tap **Start**.
- Shiny, black and see-through surfaces scan poorly.
- Decide on the torch before you start: use it in a dark room. In a lit room, the room's lights give a better result.

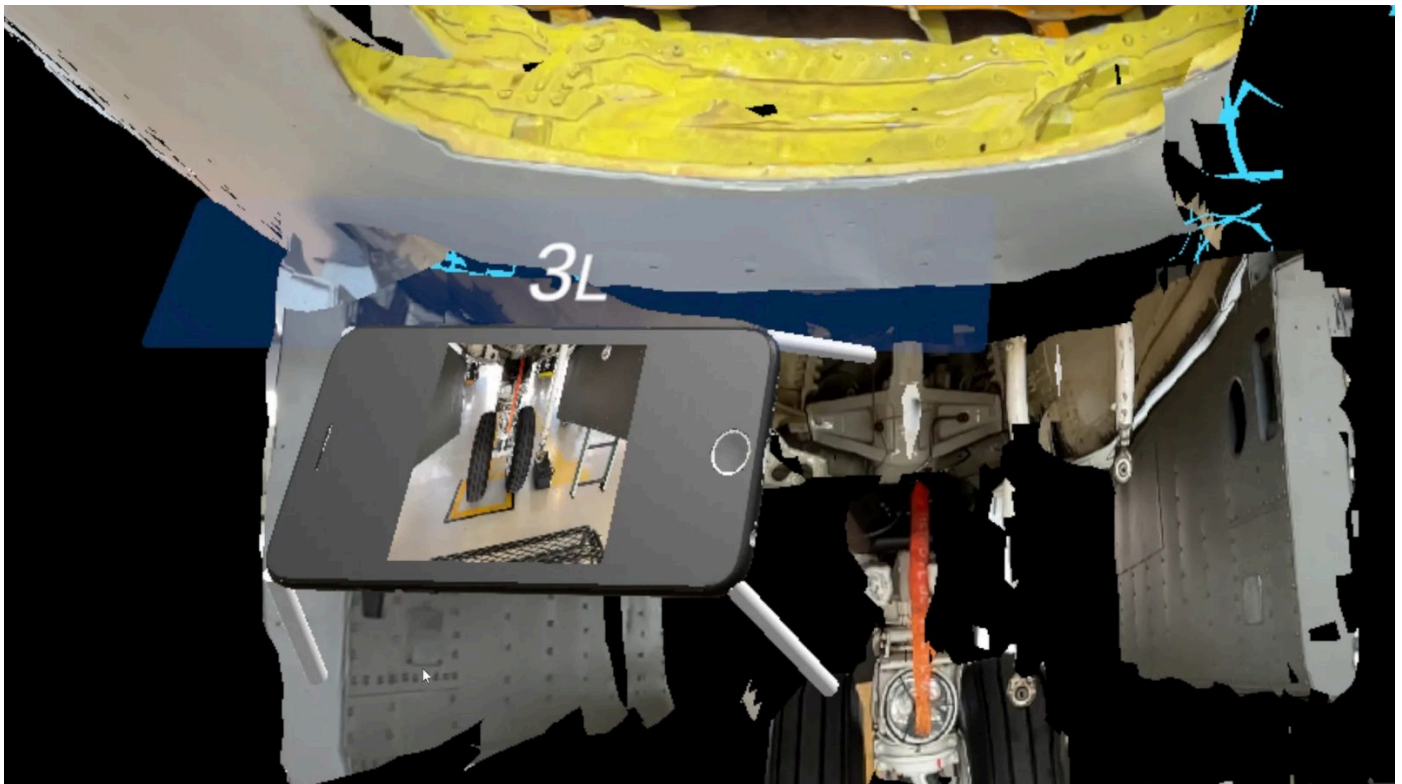
Avatars

App

Everyone in a job appears to the others as an avatar, with their name above it.

How people appear

- **iPad and iPhone users** appear as a tablet or phone, showing their live camera. It turns as they turn between portrait and landscape.
- **Meta Quest and HTC VIVE Focus Vision users** appear as a full-body avatar. Its hands and fingers follow the user's real hands.





The name above an avatar is the user's **Display Name**, or their username if they have none. Users set their display name in the Web Console's [Profile](#).

Choosing an avatar

A Business Admin chooses each user's avatar from 10 preset avatars, in the Web Console: **Users** → edit the user → **Select Avatar** (see [Users](#)). Avatars cannot be changed in the app.

Edit User

Username

Email

Display Name

☐ Business Admin

Select Avatar





















CLOSE

RESET MFA

CONFIRM ACCOUNT

DELETE USER

SAVE CHANGES

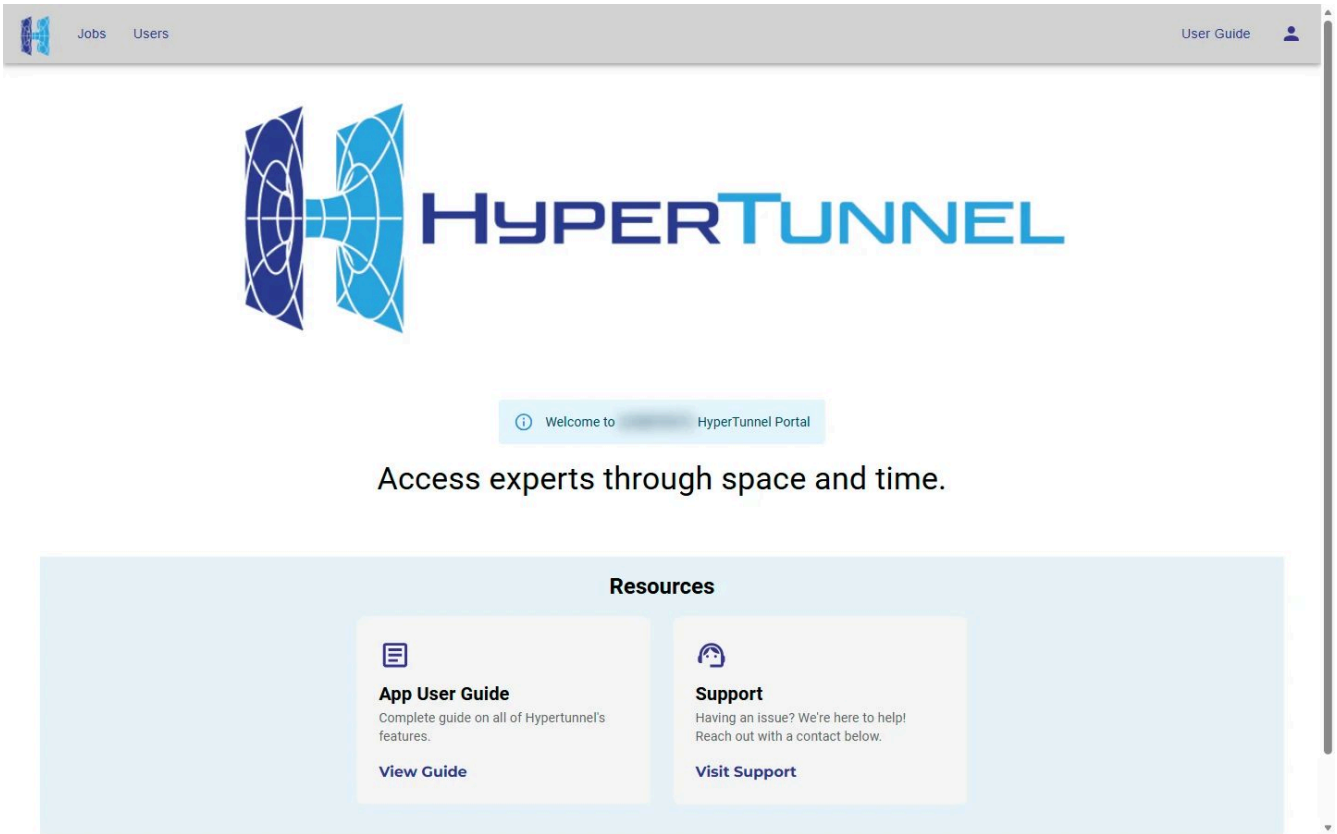
Sharing your camera

Everyone's camera view is shared when they enter a job, so others can watch it (see [Casting a Live Video Feed](#)).

The Web Console

Web Console

After you sign in, the home page welcomes you to your business's HyperTunnel portal and links to this guide and to HyperTunnel support.



Top bar

Item	Who sees it	What it does
HyperTunnel logo	Everyone	Returns to the home page
Jobs	Everyone	Opens the Job List
Users	Business Admins	Opens Users
User Guide	Everyone	Opens this guide in a new tab

Item	Who sees it	What it does
Person icon	Everyone	Opens the person menu

Person menu

The person menu shows your username, then:



- **Profile:** your account details and display name (see [Profile](#)).
- **Business Settings:** the business's limits, devices and mesh scan settings (Business Admins; see [Business Settings](#)).
- **Device Access:** requests to sign in from new devices (Business Admins; see [Device Access Requests](#)).
- **Sign out** (everyone).

Roles

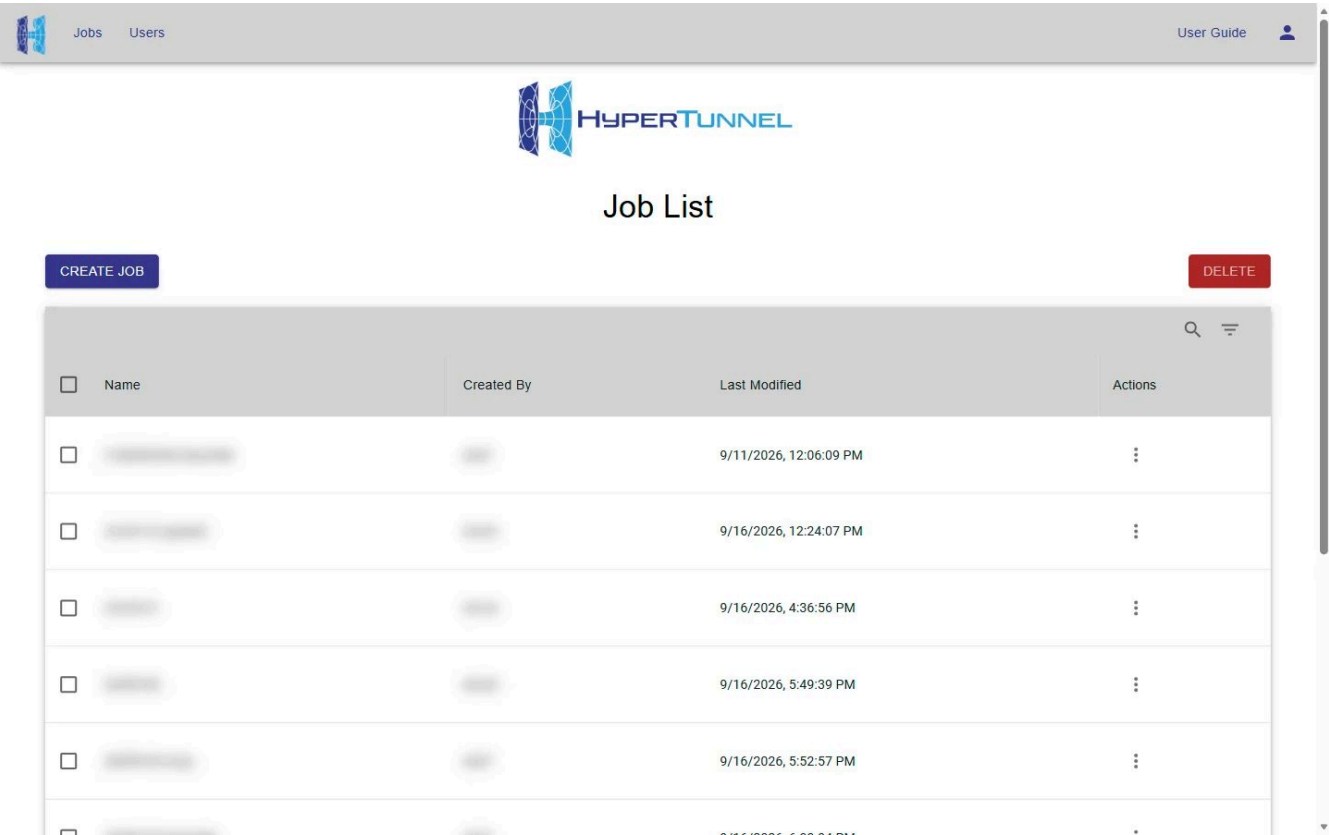
There are two kinds of user:

- **Users** work with jobs: create, import, duplicate, rename, export and delete them, and manage their assets. They can also change their own display name in **Profile**.
- **Business Admins** can do all of that, and also manage users, business settings and device access. Pages for Business Admins are marked **Business Admin** in this guide.

Job List

Web Console

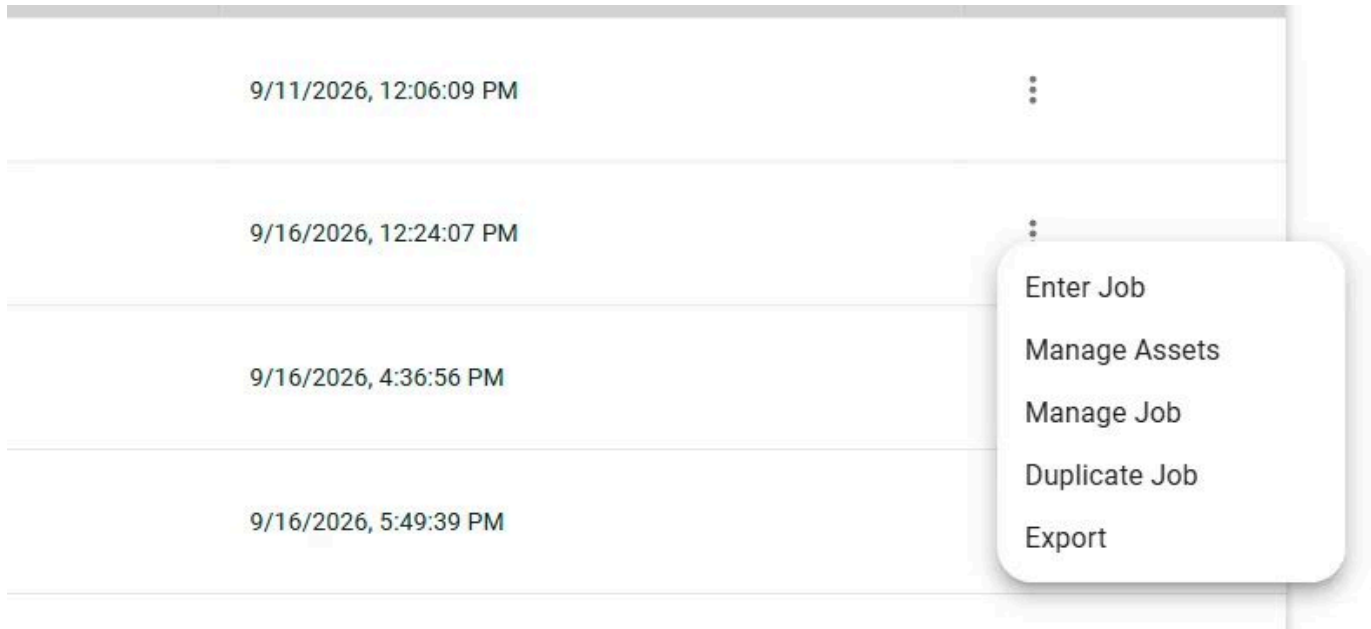
A **job** is a shared 3D workspace for a task, a service ticket or a project. It holds one or more locations, the assets placed in them, and the HyperNotes recorded there. Click **Jobs** in the top bar to see your business's jobs.



- Each job shows its **Name**, who created it (**Created By**) and when it last changed (**Last Modified**, in your local time). Click a column heading to sort by it.
- **Search** (magnifying glass) finds jobs by text; **Filter Table** narrows the list by name or creator.
- Show 10, 50 or 100 rows per page.
- The list refreshes itself every 10 seconds, keeping your search, sort and page. If it cannot reach HyperTunnel several times in a row, it stops and shows "Auto-refresh paused after repeated errors." Click **Retry**.

The **:** menu

Each job's **:** menu holds what you can do with it:



Item	What it does
Enter Job	Opens the job in the HyperTunnel app on your iPhone, iPad or Quest (see Enter Job from the Web)
Manage Assets	The job's files and mesh scans (see Assets)
Manage Job	Rename the job, its locations and its HyperNotes (see Manage Job)
Duplicate Job	Make a copy of the job (see Duplicate Job)
Export	Download the job or its assets (see Exporting Content)

Create a job

1. Click **Create Job**. The **Create a Job** dialog opens.
2. The **Job Name** is filled in with a generated name such as `26285-01`: the year and day of the year, then a number for that day. Keep it or type your own.
3. Click **Create Job**.

The job appears in the list. It starts with one location, its home base, for users entering in VR.

Create a Job

Job Name

☐ Import job from ZIP file

Job will be created for business:

CANCEL

CREATE JOB

Job names:

- can be 1–100 characters long;
- can use letters, numbers, spaces, hyphens (-), underscores (_) and dots (.);
- must be different from every other job in your business. Capitals count: "Alpha" and "alpha" are different names.

Importing a job

A job exported with **Export Job** (see [Exporting Content](#)) can be brought back as a new job.

1. Click **Create Job**, then tick **Import job from ZIP file**. The dialog becomes **Import a Job**.
2. Click **Select ZIP File** and choose the exported `.zip` file.
3. Enter a **Job Name** for the imported job.
4. Click **Import Job**.

"Import started." confirms the upload. The job appears in the list when HyperTunnel has finished processing it.

Delete jobs

1. Tick the jobs to delete.
2. Click **Delete** and confirm.

 WARNING

Deleting a job cannot be undone. Export it first if you may need it again.

A job that someone has checked out in the app, or that HyperTunnel is processing, cannot be deleted. If any job you ticked is busy, nothing is deleted, and a message names the busy jobs.

Manage Job

Web Console

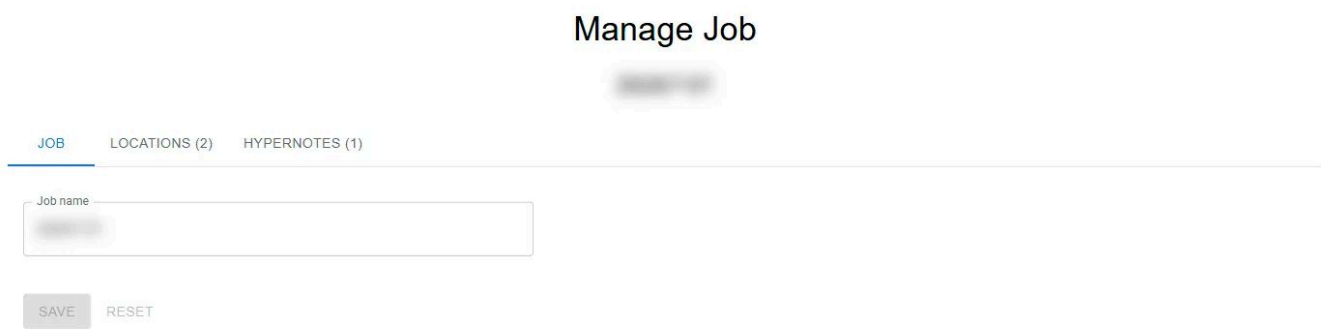
See also: [Job List](#)

Manage Job renames a job and the locations and HyperNotes inside it.

- 1. In the top bar, click **Jobs**.
- 2. In the job's row, click , then **Manage Job**.

The page has three tabs: **Job**, **Locations** and **HyperNotes**. The tabs show how many locations and HyperNotes the job has.

Rename the job



- 1. On the **Job** tab, type the new name in **Job name**.
- 2. Wait for "Job name is available". (The name follows the same rules as when creating a job; see [Job List](#).)
- 3. Click **Save**. "Job renamed to ..." confirms it.

Reset puts the current name back.

Rename a location or a HyperNote

Manage Job



1. On the **Locations** or **HyperNotes** tab, click the pencil next to the name.
2. Type the new name.
3. Press **Enter** or click ✓ to save; press **Escape** or click ✕ to cancel.

Two locations, or two HyperNotes, may share a name: you are asked to confirm with **Use anyway**.

- On **Locations**, the job's VR home base is marked (**Default VR**).
- On **HyperNotes**, each note also shows its location, who recorded it, its length and when it was made, in your local time. The newest generated names are listed first.

If people are in the job

If someone is in the job when you rename something, you are asked first. They keep seeing the old name until they leave and enter the job again. Click **Rename anyway** to continue.

When renaming is blocked

Names cannot be changed while the job is busy. A yellow banner says why:

- "This job is checked out by ...": wait until it is checked in (see [Check In/Check Out](#)).
- "This job is being processed ...": an export, import, duplicate or maintenance is running. Wait until it finishes.

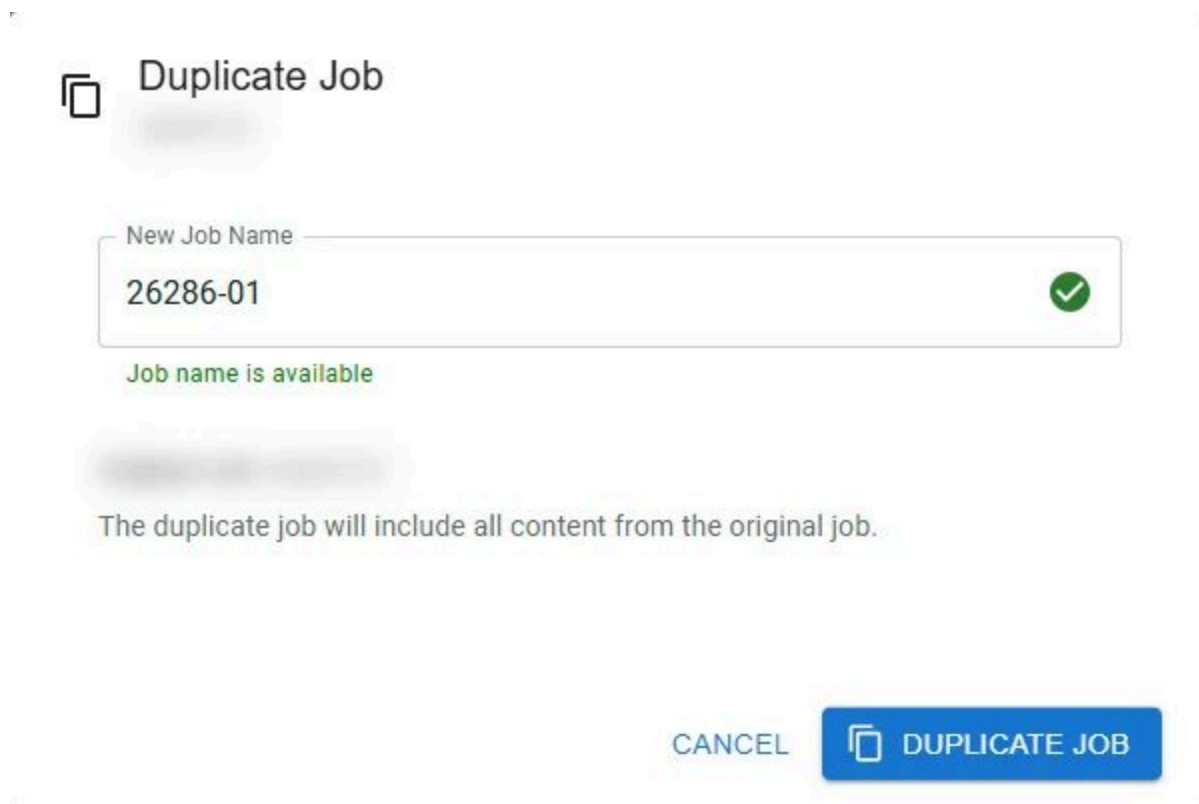
The page checks every 10 seconds and unblocks itself when the job is free.

Duplicate Job

Web Console

See also: [Job List](#)

Duplicate Job makes a new job with all of the content of an existing one.



The screenshot shows a 'Duplicate Job' dialog box. At the top, there is a title bar with a document icon and the text 'Duplicate Job'. Below this is a text input field labeled 'New Job Name' containing the text '26286-01'. To the right of the input field is a green checkmark icon. Below the input field, the text 'Job name is available' is displayed in green. At the bottom of the dialog, there is a message: 'The duplicate job will include all content from the original job.' Below this message are two buttons: 'CANCEL' and 'DUPLICATE JOB'. The 'DUPLICATE JOB' button is blue and features a document icon.

1. In the top bar, click **Jobs**.
2. In the job's row, click **:**, then **Duplicate Job**.
3. The **New Job Name** is filled in with a generated name. Keep it or type your own, and wait for "Job name is available". (Names follow the rules in [Job List](#).)
4. Click **Duplicate Job**.
5. "Duplicate Task Created" confirms the request. Click **Done**.

The copy appears in the Job List when HyperTunnel has finished making it. While it is being made, the original job is busy: it cannot be checked out, renamed, exported or deleted.

If the original job is busy already (checked out, or being processed), the duplicate is refused with "Job is busy, please try again later."

Enter Job from the Web

Web Console

iPad & iPhone

Meta Quest

See also: [Job List](#) · [Entering a Job](#)

Open the Web Console on the device you want to use, and jump from a job in the list straight into the HyperTunnel app.

Before you start

- Use an **iPhone**, **iPad** or **Meta Quest** that has the HyperTunnel app installed.
- **Open the app and sign in** on that device first.

Steps

1. On that device, open the Web Console in the browser and click **Jobs**.
2. In the job's row, click **:**, then **Enter Job**. The dialog prepares a link ("Preparing the link...").
3. Tap **Open in HyperTunnel**. The app opens and enters the job.
 - On an iPhone or iPad, the app opens on the job's location list: pick a location and how to enter (see [Location Selection](#)).

If the app does not open, check that it is open and signed in on this device, then try again.

The link

- The link works for 15 minutes, for anyone signed in to your business account. It is not shown or shared: it is meant for the device you are using.
- Closing the dialog does not cancel the link. To stop it working before then, click **Cancel link**.

Assets

Web Console

See also: [Objects](#)

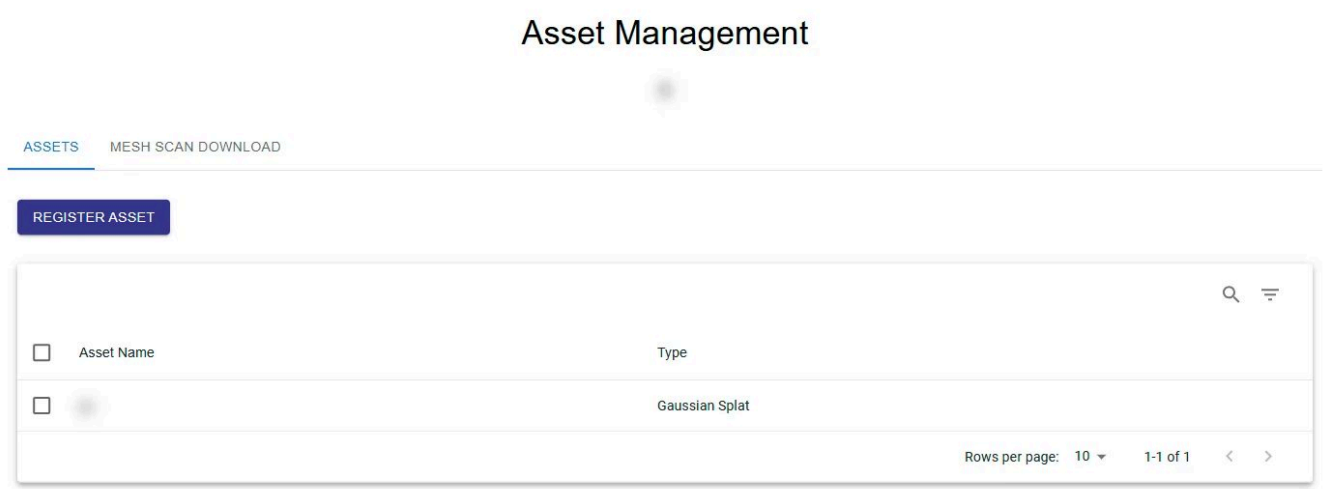
Assets are the files a job uses: 3D models, images, videos, audio, PDFs and Gaussian splats. Once registered to a job, they are on the job's **Shelf** in the app, where anyone in the job can place them (see [Spawn from Shelf](#)).

Opening a job's assets

1. In the top bar, click **Jobs**.
2. In the job's row, click **:**, then **Manage Assets**.

The **Asset Management** page opens with the job's name under the heading. It has two tabs: **Assets** and **Mesh Scan Download**.

Assets tab



The list shows each asset's **Asset Name** and **Type**.

- **Search** (magnifying glass) finds assets by name. **Filter Table** narrows the list by name or type.
- Show 10, 50 or 100 rows per page.
- The list refreshes itself every 10 seconds.
- A 3D model is listed once, even though HyperTunnel keeps extra processed copies of it.

To add a file, click **Register Asset**. The steps are in [Upload Assets](#).

NOTE

Assets cannot be renamed or deleted from this page.

Mesh Scan Download tab

Mesh scans are made on an iPad with the [Scan](#) tool. After a scan is saved, HyperTunnel processes it into a textured 3D model (a `.g1b` file). This tab lists the job's scans so you can download them.

Asset Management

ASSETS MESH SCAN DOWNLOAD

Scanned Mesh Assets

 REFRESH

 DOWNLOAD

 DOWNLOAD

 DOWNLOAD

- Each scan is named `{job}_{location}_{date and time}`, for example `26257-01_Lobby_2026-09-14T15_02_11Z`. The time is in UTC.
- **Download** appears once the scan has finished processing. A scan still being processed is listed without it.
- Click **Refresh** to check for new scans. The list also refreshes itself every 10 seconds.

To include scanned meshes in a ZIP export with the job's other assets, see [Exporting Content](#).

Upload Assets

Web Console

Register a file to a job from the Web Console. Once uploaded, it is on the job's **Shelf** in the app, where anyone in the job can place it (see [Spawn from Shelf](#)).

Steps

1. In the top bar, click **Jobs**. In the job's row, click  , then **Manage Assets**.

2. On the **Assets** tab, click **Register Asset**. The **Asset Form** opens.
3. Enter an **Asset Name**.
4. Choose the **Asset Type**. The form shows the file types it accepts.
5. Click **Upload File** and choose the file.
6. For a **Mesh**, set the options described under [3D model options](#).
7. Click **Submit**. The button reads **Loading...** while the file uploads.

When the upload finishes, the form closes and the asset appears in the list. Keep the form open until then: a large file can take several minutes.

Asset Form

Asset Name *

Loading dock photo

Asset Type: *

Image

Upload File *

Choose Files

No file chosen

Acceptable file types: .jpg, .jpeg, .png

CLOSE

SUBMIT

Asset types and file formats

Asset Type	Files accepted	In the app
Mesh	.zip, .obj, .fbx, .glb, .gltf, .ply, .stl	A 3D model
Image	.jpg, .jpeg, .png	An image panel

Asset Type	Files accepted	In the app
Video	.mp4	A video panel; tap to play
Audio	.wav, .mp3, .ogg	An audio player
PDF	.pdf	A PDF viewer (see PDF Viewer)
Gaussian Splat (.ply)	.ply	A Gaussian splat capture of a place

3D model options

These appear when the **Asset Type** is **Mesh**.

Asset Form

Asset Name *

Pump room model

Asset Type: *

Mesh

3D Transform Offset

Position:

X 0 Y 0 Z 0

Rotation:

X 0 Y 0 Z 0

Object Type:

☒ Shelf Object

☐ Environment Object

File Scale:

☒ Metric

☐ Imperial

☐ Custom

3D Processing:

☐ Double Sided Mesh

☐ Point Cloud

☐ Include Directory

Include Directory: Check this for OBJ files that reference external material (.mtl) and texture files.

Important: When using "Include Directory":

- **Recommended:** Upload all files (OBJ + MTL + textures) as a ZIP archive
- **Alternative:** Upload OBJ file first, then upload MTL and texture files separately to the same job
- The processing agent will look for related files during 3D processing

Note: If MTL/texture files are missing, the model may appear without materials or textures.

Upload File *

Choose Files No file chosen

Acceptable file types: .zip, .obj, .fbx, .gltf, .ply, .stl

For OBJ files with materials/textures: Check "Include Directory" to select the entire folder containing all related files

- **3D Transform Offset:** moves (**Position X, Y, Z**) and turns (**Rotation X, Y, Z**) the model when it is placed. Enter whole numbers; all are 0 by default.

- **Object Type:**
 - **Shelf Object** (default): the model goes on the job's Shelf.
 - **Environment Object:** the model also becomes the job's environment, the 3D surroundings users see when they enter the job.
- **File Scale:** the units the file was made in: **Metric** (default), **Imperial**, or **Custom** with a **Custom Value**.
- **3D Processing:**
 - **Double Sided Mesh:** show the faces of the model from both sides.
 - **Point Cloud:** process the file as a point cloud.
 - **Include Directory:** for an OBJ model that uses separate material (.mtl) and texture files.

OBJ models with materials and textures

An .obj file often relies on a .mtl file and texture images next to it. Without them, the model appears without its colors and textures. Either:

- **Recommended:** put the .obj, .mtl and texture files in one ZIP file and upload the ZIP, or
- tick **Include Directory**, then click **Select Directory (containing OBJ + MTL + Textures)** and choose the folder. The form shows how many files it found, for example "1 OBJ, 1 MTL, 4 textures", and packages them into one ZIP for you. The folder must contain exactly one .obj file.

If the upload is refused

- **"Job is busy, please try again later."** Someone has the job checked out in the app, or HyperTunnel is processing it. Try again later.
- **"Asset upload failed."** Check the job's asset list before trying again: the asset may have been partly registered.

Exporting Content

Web Console

The **Export** dialog makes downloadable copies of a job:

- **Export Job:** the whole job in one archive. You can import it again as a new job (see [Job List](#)).
- **Export Assets:** chosen kinds of asset (meshes, scanned meshes, images, videos, audio recordings, PDFs and HyperNotes) in one ZIP file.

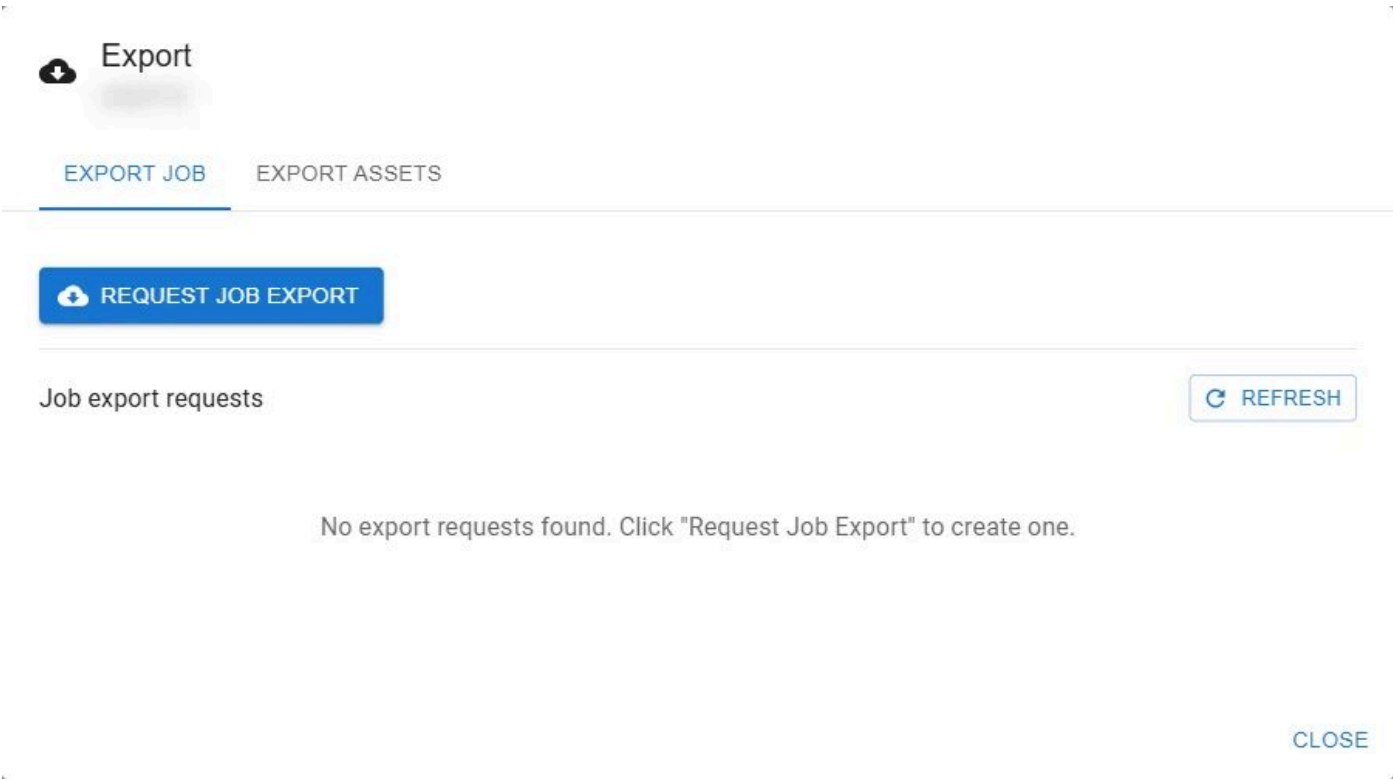
An export is prepared in the background. You can close the dialog and come back for the download later.

Opening the Export dialog

1. In the top bar, click **Jobs**.
2. In the job's row, click **:**, then **Export**.

The dialog opens on the **Export Job** tab, with the job's name under the title.

Export a whole job



1. On the **Export Job** tab, click **Request Job Export**.

2. The request appears under **Job export requests** as **Processing**.
3. When it shows **Ready**, click **Download**.

Export assets

Export

EXPORT JOB EXPORT ASSETS

New assets export request

Job Assets

☐ Meshes 0 ☒ Scanned Meshes (Packaged Only) 3

☒ Images 2 ☒ Videos 1

☒ Audio Recordings 1 ☐ PDFs 0

☒ HyperNotes 1

Total Assets: 8 Fetched: 9:37:02 PM

REFRESH EXPORT SELECTED (8)

Assets export requests REFRESH

No assets export requests found for this job.

CLOSE

1. Click the **Export Assets** tab. Under **Job Assets**, each kind of asset shows how many the job has.
2. Tick the kinds you want. Every kind the job has is ticked to start with; kinds with none are greyed out. **Select All / Deselect All** ticks or clears them all.
3. Click **Export Selected (N)**, where N is the number of files that will be exported.
4. "Export Task Created Successfully!" confirms the request. It appears under **Assets export requests**.
5. When it shows **Ready**, click **Download**.

Refresh next to the counts re-counts the job's assets, for example after an upload.

i NOTE

Scanned Meshes (Packaged Only) counts only scans that have finished processing. A scan still being processed is not exported yet; check the job's **Mesh Scan Download** tab (see [Assets](#)).

Export requests

Each tab lists its own requests, newest first. A request shows its file name, when it was created, and its status:

Status	Meaning	Actions
Processing	The export is being prepared	—
Ready	The file is ready	Download, Delete
Failed	The export did not complete; the error is shown	Delete

The lists refresh every 10 seconds; **Refresh** updates them at once.

Export files are named after the job and the time the export was requested (in UTC), for example `Hangar_3_2026-10-12T15_04_05_123Z.zip` for a job export and `Hangar_3_assets_2026-10-12T15_04_05_123Z.zip` for an assets export. Characters other than letters, digits, `-` and `_` in the job name become `_`.

Deleting an export

1. Click **Delete** on a **Ready** or **Failed** request.
2. Confirm with **Delete**.

The request leaves the list and its download stops working. The file itself is deleted permanently after a retention period. A request that is still **Processing** cannot be deleted.

If an export is refused

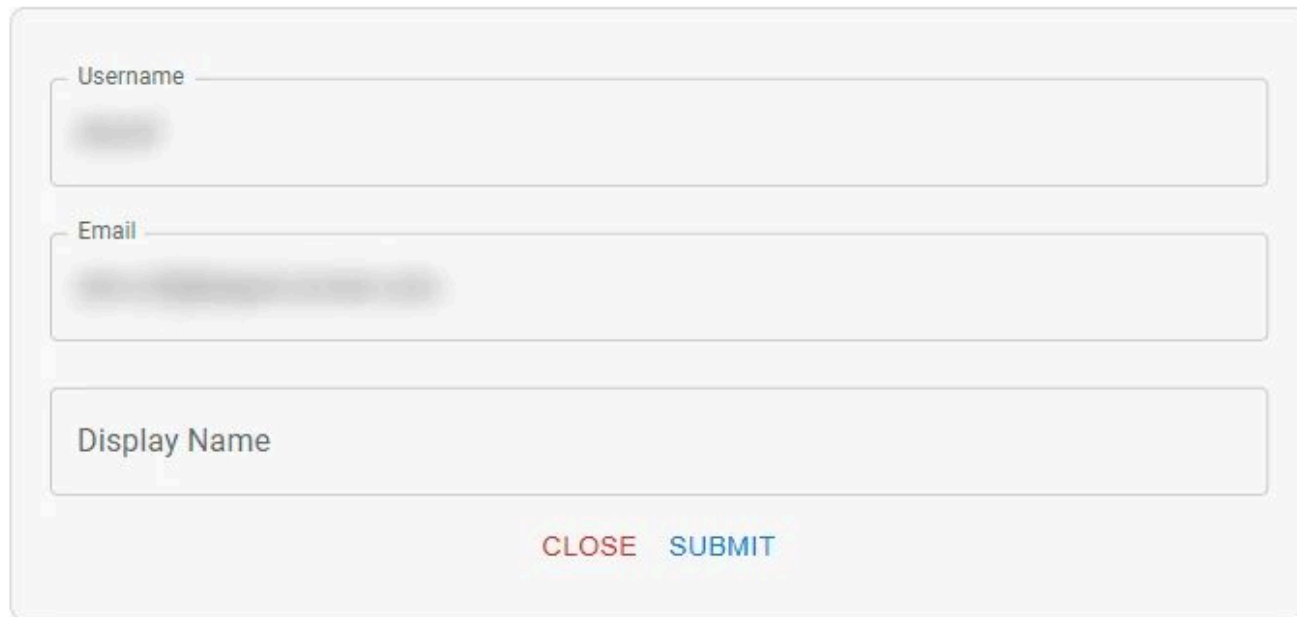
"Job is busy, please try again later." means someone has the job checked out in the app, or HyperTunnel is processing it (for example another export or a duplicate). Try again when it is free.

Profile

Web Console

Open the person menu (top right) and click **Profile**.

Profile



Username

Email

Display Name

CLOSE SUBMIT

- **Username** and **Email** cannot be changed here. A Business Admin can change your email on the [Users](#) page.
- **Display Name** is the name others see in the app. Change it and click **Submit**.

Close returns to the home page without saving.

Users

Business Admin

Web Console

The **Users** page lists everyone in your business account. Only a Business Admin sees it: click **Users** in the top bar.

User List

ADD USER

Users: 14/200

Name	Email	Actions
[REDACTED]	[REDACTED]	 
[REDACTED]	[REDACTED]	 
[REDACTED]	[REDACTED]	 
[REDACTED]	[REDACTED]	 
[REDACTED]	[REDACTED]	 

- The list shows each user's **Name** (their username) and **Email**, with edit (pencil) and delete (bin) buttons.
- **Users: n/max** shows how many users the business has and how many it may have. At the limit, **Add User** is disabled: delete a user you no longer need, or contact HyperTunnel to raise the limit.
- Search, filter and paging work as on the [Job List](#). The list refreshes every 10 seconds.

Add a user

1. Click **Add User**.
2. Enter a **Username** and the user's **Email**. The username cannot be changed later.
3. Tick **Business Admin** if the user should manage users and business settings too.
4. Click **Create User**.

The user is emailed a temporary password. At their first sign-in they choose a new password and set up an authenticator app (see [Signing In](#)). Every new user can use all of the business's tools.

Edit a user

Click the pencil in the user's row. The **Edit User** dialog opens.

Edit User

Username

Email

Display Name

☐ Business Admin

Select Avatar

CLOSE RESET MFA CONFIRM ACCOUNT DELETE USER SAVE CHANGES

- **Username** cannot be changed.
- **Email**: where HyperTunnel sends the user's emails, such as a temporary password.
- **Display Name**: the name others see in the app.
- **Business Admin**: tick to make the user a Business Admin. An existing Business Admin cannot be changed back to a regular user here.
- **Select Avatar**: the avatar the user appears as in the app (see [Avatars](#)).

Click **Save Changes** to save, or **Close** to leave without saving.

Reset MFA

Use **Reset MFA** when a user has lost the phone or app that makes their sign-in codes (their authenticator).

1. Open the user's **Edit User** dialog and click **Reset MFA**.
2. Confirm.

WARNING

Reset MFA ends all of the user's sessions, and their old password and authenticator stop working. They are emailed a new temporary password, then choose a new password and set up their authenticator again at their next sign-in. No other user is affected.

You cannot reset your own MFA: ask another Business Admin. If a user had not finished setting up their account, Reset MFA sends their invitation again instead.

Confirm an account

Use **Confirm Account** when a new user cannot finish their first sign-in, for example because their temporary password expired. It confirms the account so that the user can choose a password with **Forgot your password?** on the sign-in screen.

Click **Confirm Account**, then **OK** in the confirmation. You cannot confirm your own account.

WARNING

Confirm Account replaces the user's current password. Tell the user to use **Forgot your password?** next.

Delete a user

1. Click the bin in the user's row, or **Delete User** in the **Edit User** dialog.
2. Confirm with **Delete**.

The user is removed and can no longer sign in. They can be added again later with the same username. You cannot delete your own account.

Business Settings

Business Admin

Web Console

Open the person menu (top right) and click **Business Settings**. Only a Business Admin sees it. The page has two tabs: **General** and **Mesh Scan Bake**.

General

The screenshot shows the 'Business Settings' page with the 'GENERAL' tab selected. The interface includes several input fields for configuration: 'Business Name' (blurred), 'Max User Count' (set to 200), 'Video Frame Rate' (set to 24), 'Max Jobs' (set to 20), and 'Max Locations Per Job' (set to 5). Below these is the 'Device ID List' section, which shows '8 / 20 Device IDs used'. It features a 'New Device ID' input field with 'ADD' and 'REMOVE' buttons. A table below lists existing device IDs, each with a checkbox and a search icon in the top right corner.

- **Business Name:** your business account. It cannot be changed here.
- **Max User Count:** how many users the business may have, set by HyperTunnel. The [Users](#) page stops adding users at this number. To change it, contact HyperTunnel.
- **Video Frame Rate:** the frame rate of video captured in the app.
- **Max Jobs** and **Max Locations Per Job:** the business's limits on jobs, and on locations in each job.

Device ID List

Some businesses allow sign-in only from registered devices. The **Device ID List** holds those devices, and "n / max Device IDs used." shows how many of the business's slots are taken.

- To add a device, type its ID in **New Device ID** and click **Add**.

- To remove devices, tick them and click **Remove**.

A device that is not on the list can ask for access when someone signs in on it. Approving the request adds the device here (see [Device Access Requests](#)).

Click **Save** to keep your changes, including additions and removals in the Device ID List. "Saved." confirms it; if the save fails, a message says your changes were not saved. **Close** leaves the page; with unsaved changes it asks first.

Mesh Scan Bake

Mesh scans made in the app are processed ("baked") by HyperTunnel into textured 3D models. This tab sets how your business's scans are baked. Changes apply to scans baked after you save; bakes already running are not affected.

Business Settings

GENERAL MESH SCAN BAKE

How this business's mesh scans are processed into textured 3D models. Default follows the standard setting, including any future change to it.

ⓘ Applies to mesh scans baked after you save. Bakes already running are not affected.

Color

Color equalization

Default (On) ▼

Matches exposure and white balance between the photos a scan is painted from, and brightens scans taken in low light.

Geometry

Simplify mesh

Default (Off) ▼

Reduces the number of triangles before texturing, using the standard settings (5 mm tolerance, edges and thin parts protected). Bakes finish faster.

CLOSE RESET ALL TO DEFAULTS SAVE

Each setting is **Default**, **On** or **Off**. **Default** follows HyperTunnel's standard setting, including any future change to it; a setting you change shows **Overridden**.

Setting	Default	What it does
Color equalization	On	Matches exposure and white balance between the photos a scan is painted from, and brightens scans taken in low light. Off paints each photo as captured, so color and brightness can change visibly where one photo meets the next
Simplify mesh	Off	Reduces the number of triangles before texturing, so bakes finish faster. Some surfaces can look worse

- **Save** keeps your changes. "Saved. Mesh scans baked from now on use these settings." confirms it.
- **Reset all to defaults** sets every setting back to **Default**. Click **Save** afterwards to keep it.
- If another admin saved in the meantime, your save is refused and their settings are shown. Make your changes again.

Device Access Requests

Business Admin

Web Console

Some businesses allow sign-in only from registered devices. When someone signs in to the app on a device that is not registered, the sign-in is refused and a request is sent to the business's admins. The user sees "Sign-in denied. A device access request has been submitted to your business administrator for approval."

Open the person menu (top right) and click **Device Access**. Only a Business Admin sees it.

The screenshot shows the 'Device Access Requests' page in a web console. At the top, there's a navigation bar with 'Jobs' and 'Users' links, and a 'User Guide' link with a user icon. Below the navigation bar, the title 'Device Access Requests' is centered. Under the title, it says '8 / 20 device IDs used.' and there are two buttons: 'APPROVE' (blue) and 'REJECT' (red). The main content is a table with 11 rows of request data. Each row has a checkbox on the left, followed by columns for 'Requested By', 'Device ID', 'Platform', 'Also Requested By', 'Status', 'Status Updated (local)', and 'Requested On (local)'. The status values are 'Approved' or 'Rejected'. At the bottom right of the table, there's a pagination control showing 'Rows per page: 10' and '1-10 of 11'.

☐	Requested By	Device ID	Platform	Also Requested By	Status	Status Updated (local)	Requested On (local)
☐	[redacted]	[redacted]	[redacted]		Approved	8/5/2026, 3:05:15 PM	8/5/2026, 3:05:17 PM
☐	[redacted]	[redacted]	[redacted]		Rejected	8/5/2026, 3:05:26 PM	8/5/2026, 3:05:27 PM
☐	[redacted]	[redacted]	[redacted]		Rejected	8/5/2026, 4:08:02 PM	8/5/2026, 4:08:03 PM
☐	[redacted]	[redacted]	[redacted]		Approved	8/6/2026, 5:31:49 PM	8/6/2026, 5:31:51 PM
☐	[redacted]	[redacted]	[redacted]		Approved	8/12/2026, 11:13:05 AM	8/12/2026, 11:13:05 AM
☐	[redacted]	[redacted]	[redacted]		Approved	8/12/2026, 11:20:54 AM	8/12/2026, 11:20:55 AM
☐	[redacted]	[redacted]	[redacted]		Approved	8/12/2026, 12:02:52 PM	8/12/2026, 12:02:52 PM
☐	[redacted]	[redacted]	[redacted]		Approved	8/12/2026, 12:18:47 PM	8/12/2026, 12:18:47 PM
☐	[redacted]	[redacted]	[redacted]		Approved	8/13/2026, 11:29:38 AM	8/13/2026, 11:29:38 AM
☐	[redacted]	[redacted]	[redacted]		Approved	9/1/2026, 12:02:47 PM	9/1/2026, 12:02:48 PM

Each request shows who asked (**Requested By**), the **Device ID**, the **Platform**, anyone else who asked for the same device (**Also Requested By**), the **Status** (**Pending**, **Approved** or **Rejected**), and when it was made and last changed, in your local time. Pending requests are listed first.

Approve or reject

1. Tick one or more **Pending** requests.
2. Click **Approve** or **Reject**. It happens at once, with no confirmation.

Approving adds the device to the business's **Device ID List** (see [Business Settings](#)), and the user can sign in on it. "n / max device IDs used." shows how many slots remain. If approving your selection would need more slots than remain, **Approve** is disabled: remove a device in Business Settings first, or reject some of the requests.

Availability

Which devices and modes each feature works on. This page is built from the guide's own pages, so it always matches them.

In the app

✓ = available on that device. Modes says whether a feature works in AR mode, VR mode or both; a blank means it is not tied to a mode, such as the job list.

Feature	iPad & iPhone	Meta Quest	VIVE Focus Vision	Modes	Page
Arrows		✓	✓	VR	Objects
Calibration	✓			AR	Entering a Job
Casting a Live Video Feed	✓	✓	✓	AR, VR	Communication
Check In/Check Out	✓	✓	✓		Lobby and Job List
Create Job	✓	✓	✓		Lobby and Job List
Delete Job	✓	✓	✓		Lobby and Job List
Enter Job	✓	✓	✓		Entering a Job
Exit Job	✓	✓	✓	AR, VR	In a Job
HyperCall	✓	✓	✓	AR, VR	Communication
HyperNote	✓	✓	✓	AR, VR	

Feature	iPad & iPhone	Meta Quest	VIVE Focus Vision	Modes	Page
Jump Locations	✓	✓	✓	AR, VR	Moving Around
Lobby Settings	✓	✓	✓		Lobby and Job List
Location Selection	✓			AR, VR	Entering a Job
Mute Audio	✓	✓	✓	AR, VR	In a Job
Mute Microphone	✓	✓	✓	AR, VR	In a Job
Offline Mode	✓	✓	✓		Lobby and Job List
PDF Viewer	✓	✓	✓	VR	Objects
Photo	✓			AR	Objects
Rock Climb		✓	✓	VR	Moving Around
Scale to Delete	✓	✓	✓	AR, VR	Objects
Scan	✓			AR	Scanning
Sign In / Sign Out	✓	✓	✓		Signing In
Spatial Audio		✓	✓	VR	Communication
Spawn from Shelf	✓	✓	✓	VR	Objects
Stage Opacity	✓	✓	✓	AR, VR	In a Job
Teleport		✓	✓	VR	Moving Around

Feature	iPad & iPhone	Meta Quest	VIVE Focus Vision	Modes	Page
Torch Mode	✓			AR	Entering a Job
Video	✓			AR	Objects
Viewing a Live Video Stream	✓	✓	✓	AR, VR	Communication
World Rotate		✓	✓	VR	Moving Around

In the Web Console

These are in the Web Console, in your browser.

- Duplicate Job
- Enter Job from the Web
- Manage Job
- Upload Assets, on Assets

Troubleshooting

App

Error codes when entering a job

When the app cannot enter a job, its message usually ends with a code, such as "(Error: D9)". Quote the code if you contact support.

Code	Message	What to do
D1	"User is already entering this job on another device."	Finish or cancel on the other device
D2, C3	"Failed to enter. User already entered."	You may still count as in the job from a moment ago. Wait a minute and try again
D7	"Maximum AR users reached at the selected location."	Only one person can be in AR at each location. Enter in VR, or choose another location
D9	"A HyperNote is currently being recorded. Please try again later."	Wait for the recording to finish
D10	"A HyperNote is currently being played. Please try again later."	Wait for playback to finish
D12	"Mesh scanning is currently in progress. Please try again later."	Wait for the scan to finish
D13	"Photo capturing is currently in progress. Please try again later."	Try again in a moment

Code	Message	What to do
D14	"Shelf spawning is currently in progress. Please try again later."	Try again in a moment
D15	"Video recording is currently in progress. Please try again later."	Wait for the recording to finish
D17	"Timed out while preparing the job. Please try again."	Try again
L10	"Failed to find a valid location to enter."	The location may have been removed. Choose another one, or ask your Business Admin
S3	"Failed to enter. Content is corrupted."	This job has a problem. Contact support; other jobs are not affected
B2	"This device cannot enter."	This device is not supported
S2, S8, B3	"Critical build error. Contact HyperTunnel."	Update or reinstall the app, then contact support if it continues
X1, X2, X3	"Disconnected from server. Please try again."	Your connection dropped, on entry or during the job. Check your network and enter again
V...	"Failed to enter. Please try again."	A network or voice problem. Run Diagnose (below). V5: set your device's date and time to automatic. V1: no network. V3, V8: this network blocks HyperTunnel; try another network
Other codes	"Failed to enter. Please try again."	Try again. If it happens again, contact support with the code

Some messages have no code:

- **"Checked out by ..."**: someone has taken the job for offline work. Wait until it is checked in.
- **"Job is currently being processed. Please try again later"**: HyperTunnel is exporting, importing or duplicating the job.
- **Enter is greyed out** for a job you checked out while you are online: enter it offline (see [Offline Mode](#)).

Checking your connection

On the sign-in screen or the job list, open **Settings** (the gear) and tap **Diagnose** (see [Lobby Settings](#)). The result shows whether your connection is Good, Usable or Poor, and which readings are poor. If it is Poor, try another network.

Common problems

Calibration fails when entering in AR. Add light (turn on [Torch Mode](#) before entering), move slowly in all directions, and point at surfaces with detail. Or enter in VR (see [Calibration](#)).

I can't hear anyone, or they can't hear me. Check **Mute Audio** and **Mute Microphone** in the in-job Settings, and your device's volume. Voice works only online, not in a job you entered offline (see [HyperCall](#)).

I can't see someone's camera. They may have turned **Cast Video** off, or be offline (see [Casting a Live Video Feed](#)).

A HyperNote stays on "Pending Server Response". With several people in the job it can take up to about 30 seconds. If it takes longer, tap **Cancel** and try again.

A job's content won't load. Open **Settings** on the job list, tap **Reset Cache**, and enter the job again. The files download again. Do not use it while a scan or a check-in is still uploading.

The app signed me out. Sessions last 60 minutes from sign-in. Sign in again.

Contact support

[HyperTunnel support](#). Include the error code, the app version (in [Lobby Settings](#)), your device, and what you were doing.

Glossary

AR mode (Augmented Reality): on an iPad or iPhone, on site, the job's content appears on the real place around you, through the camera. See [Entering a Job](#).

Asset: a file registered to a job in the Web Console, such as a 3D model, image, video, audio file, PDF or Gaussian splat. See [Assets](#).

Avatar: how a person appears to others in a job. See [Avatars](#).

Bake: the processing HyperTunnel does after a mesh scan is saved, turning it into a textured 3D model. See [Scanning](#).

Business account: your company's space in HyperTunnel. Its users, jobs and settings are kept apart from other businesses'.

Business Admin: a user who can also manage users, business settings and device access in the Web Console. See [The Web Console](#).

Calibration: in AR mode, the app recognising the real place so that the job's content lines up with it. See [Calibration](#).

Casting: sharing your view live with others in the job. Everyone casts when they enter. See [Casting a Live Video Feed](#).

Checked out: a job copied to one person's device for offline work. Nobody else can enter it until it is checked in. See [Check In/Check Out](#).

Dashboard: the menu inside a job: a tab bar of buttons, each opening a tool. See [In a Job](#).

Device Access Request: a request, sent automatically, to let an unapproved device sign in to a business that allows only approved devices. See [Device Access Requests](#).

Device ID: the identifier of a device approved to sign in. See [Business Settings](#).

Entry link: a link from the Web Console's **Enter Job** that opens a job in the app on the same device. See [Enter Job from the Web](#).

Environment: a 3D model or Gaussian splat set as a job's surroundings in the Web Console. It cannot be grabbed.

Export request: a request to package a job, or its assets, as a file to download. See [Exporting Content](#).

Gaussian splat: a kind of 3D capture of a real place, uploaded as a `.ply` file.

HMD (Head-Mounted Display): a headset, such as Meta Quest or HTC VIVE Focus Vision.

Homebase: every job's virtual location, entered in VR. Headsets enter a job here.

HyperNote: a 3D recording of a job, played back later by others in the same job. See [HyperNote](#).

Job: a shared 3D workspace for a task, a service ticket or a project. It holds locations, objects and HyperNotes. (Called a "scene" before 2026.4.2.) See [Lobby](#).

Job object: an object placed in a job, such as a 3D model, image, video, PDF, video monitor or arrow. Anyone in the job can move, scale or delete it. See [Objects](#).

Location: a place within a job. A real location is created on site; every job also has Homebase. See [Location Selection](#).

Locked (busy): a job HyperTunnel is processing, for example exporting, importing or duplicating. It cannot be entered, checked out, renamed or deleted until it finishes.

Mesh scan: a 3D scan of a real location, made with an iPad or iPhone. See [Scan](#).

Offline mode: working on checked-out jobs without a connection. See [Offline Mode](#).

Shelf: a job's collection of files that can be placed in it: assets registered as **Shelf Objects** in the Web Console, and photos and videos taken in the job. See [Spawn from Shelf](#).

Stage: a location's 3D scan, the model you see in VR mode. See [Stage Opacity](#).

VR mode (Virtual Reality): seeing a location as a 3D model and moving around it remotely. Headsets are always in VR mode. See [Entering a Job](#).

Web Console: HyperTunnel in your web browser, for managing jobs, assets and users. See [The Web Console](#).

Release Notes

What changed in each release of the HyperTunnel app, newest first, as published in the app stores. To see which version you have, open **Settings** on the app's job list (see [Lobby Settings](#)).

NOTE

Scenes were renamed **Jobs** in 2026.4.2. Notes for earlier releases use the old name.

2026.5.1

iPad and iPhone

- This update is required.
- Open a Job straight from the web app: choose Enter Job and it opens in the HyperTunnel app.
- Mesh scans now have more even colour and brightness, including scans taken in the dark with Torch mode.
- Rescanning an area now replaces the earlier scan instead of blending with it.
- HyperNotes are smaller, load faster and start recording sooner. HyperNotes from earlier versions still play.
- Video monitors added while playing a HyperNote are now saved with it and shown to everyone.
- Live video and HyperNotes now keep the iPad's portrait or landscape orientation.
- Pinch an object small and release to delete it. It turns red first as a warning.
- Refreshed toolbar icons.
- Improved performance and fixed minor bugs.

Meta Quest and HTC VIVE Focus Vision

- This update is required.
- Improved hand-tracking teleport: point with a palm-up "finger gun," tuck your thumb to lock the spot, and release to go.
- Open a Job straight from the web app: choose Enter Job and it opens in the HyperTunnel app.
- The menu now opens in front of you when you enter a Job.
- Shrink an object past a set size and release to delete it. It turns red first as a warning.
- HyperNotes are smaller, load faster and start recording sooner. HyperNotes from earlier versions still play.
- Video monitors added while playing a HyperNote are now saved with it and shown to everyone.
- Live video from an iPad now shows correctly in portrait or landscape.

- Refreshed toolbar icons and a cleaner look for in-Job lists.
- Improved performance and fixed minor bugs.

2026.4.2

iPad and iPhone

- Added Torch mode for dark sites.
- Renamed “Scenes” to “Jobs.”
- New Jobs and HyperNotes now come with default names you can edit.
- Added error codes to help troubleshoot issues.
- Improved performance.

Meta Quest and HTC VIVE Focus Vision

- Renamed “Scenes” to “Jobs.”
- New Jobs and HyperNotes now come with default names you can edit.
- Casting now starts automatically while immersed, with the option to turn it off.
- Improved hand tracking and avatar hands.
- Added error codes to help troubleshoot issues.
- Improved performance and fixed minor bugs.

2026.3.6

All devices

- Updated Settings Page. Added app quit button and network diagnostics.
- Added auto-refresh to scene list page.
- Improved video stream presentation.

Meta Quest and HTC VIVE Focus Vision

- Added See-through mode in the lobby.
- Replaced in-headset keyboard.

iPad and iPhone

- Added occlusion effect for AR Mode.

2026.1.2

Summary

- Improved server responsiveness

Details

- Improved error handling capabilities
- Updated logs

Known Bugs

- Quest user cannot see avatar label of VR user during HyperNote playback
- Sometimes Scanned Mesh environment is not visible when jumping to location

Fixed Bugs

- None

2025.9.1

Summary

- Upgraded user interaction features
- Added real time hand tracking to VR Avatars

Details

- VR Avatars now have fully animated hands that track users hands in real time
- Improved error handling capabilities

Known Bugs

- None

Fixed Bugs

- None

2025.8.2

Summary

- Improved HyperNote Recording performance
- Upgraded user interaction features

Details

- Optimized size of mesh scan for improved data transfer
- Improved error handling capabilities

Known Bugs

- None

Fixed Bugs

- Toggle of microphone during video recording causes faulty recorded audio
- Fixed HyperNote related bugs

2025.7.2

Summary

- Improved overall file transfer performance
- Improved transition of updated environment scans

Detailed

Known Bugs

- Toggle of microphone during video recording causes faulty recorded audio
- HyperNote recording of mobile avatar video is upside down

Fixed Bugs

- Quest hears audio echo when talking with an iPad user
- Download time of large files in Quest and Vive takes longer than expected

2025.6.4

Summary

- Better responsiveness to device orientation changes (handheld devices)
- Faster loading time / file transfer performance

Detailed

Known Bugs

- Toggle of microphone during video recording causes faulty recorded audio
- Download time of large files in Quest and Vive takes longer than expected
- Quest hears audio echo when talking with an iPad user

Fixed Bugs

- HyperNote playback when jumping between locations
- 3D models presented at their proper scale when entering a scene

2025.5.3

Summary

- Improved HyperNote recording
- Optimized wait times for large file loading while immersed in a scene

Detailed

Known Bugs

- Videos will capture microphone audio even when the microphone is disabled during recording
- For iOS users in VR mode, the scene will automatically calibrate to the real world when entering a location with a matching world map
- HyperNote playback is not fully functional when jumping between locations
- When entering a scene, 3D models might be presented at their default scale instead of the resized scale

Fixed Bugs

- HyperNote audio and video synchronization bugs
- Scene calibration bugs
- Avatar visibility when entering a scene

2025.4.4

Summary

- Introduced Guest Mode (iOS Only)
- New User Guide & Support Link
- Bug Fixes and Optimizations

Detailed

New Features

- [Guest Mode](#) for iPhone and iPad, allowing users to experience a subset of AR or VR functionality offline.
- New [User Guide](#) with the latest HyperTunnel developments
- When jumping between locations in VR mode, the system remembers the user's last position and orientation.
- During HyperNote playback, Scene Objects and Avatar labels turn orange to show they are part of a recording and cannot be interacted with

Known Bugs

- During HyperNote playback, audio may play before its corresponding visual event, causing desynchronization
- Avatars may be invisible when first entering a scene. To fix this, exit and re-enter the scene
- On Quest 3, microphone and audio output may become disabled. Exit and re-enter the scene to resolve this issue
- Initial HyperNote recordings may freeze in a "Saving..." state. To fix this, have another user enter the scene to reset the HyperNote
- Videos will capture microphone audio even when the microphone is disabled during recording
- For iOS users in VR mode, the scene will automatically calibrate to the real world when entering a location with a matching world map
- When seeking through a HyperNote containing video, the video will restart from the beginning instead of syncing with the seek position

Fixed Bugs

- Mobile Calibration improvements
- Resolved missing scan textures in offline mode
- Hide live avatars when jumping locations during HyperNote playback
- Device memory management optimization for offline checkout

- HyperNote panel refreshes list after saving
- Fixed issue where discarding HyperNotes would freeze on "Pending Server Response"