



User Guide - Beta v1.2.2

MRx is currently in closed beta, please contact us if you are interested in participating.

MRx consist of the following:

MRx CONSOLE APP.

This is installed on your Win10 laptop/PC to manage your assets and simulations and to launch sessions.

MRx APP.

This is installed to your HoloLens devices from the MRx Console.

SESSION MANAGER.

This is launched from MRx Console for each session and is used to manage sessions from your laptop/PC.

HOW IT WORKS

CREATE SIMULATION.

Launch MRx Console on your Win10 laptop/PC:

1. Upload assets you want in your simulation.
2. Launch a session.

Launch MRx on your HoloLens:

3. Join the session.
4. Use 'gaze and drop' to create simulation.

RUN SESSION.

Launch MRx Console on your Win10 laptop/PC:

1. Select the simulation to launch local sessions or share it for remote sessions.
2. Host or join sessions.

Launch MRx on your HoloLens:

3. Join the session.

4. Collaborate on the simulation.

WHAT YOU NEED

1. Windows 10 laptop/PC with admin access.
2. Microsoft HoloLens 2 headset(s).
3. Wireless network router (for local networking).
4. Wifi internet connectivity and Microsoft account (for remote sessions only).

NETWORK REQUIREMENTS.

Local Sessions

Ports: 7779, 7780, 7781

Remote Sessions

Ports: 7779, 7780, 7781, 443, 3478; 50000+

INSTALLING MRx

1. Click on the link from the invitation email to download the MRx Console installer file. Click on the downloaded file to install MRx Console on your Windows 10 desktop..
2. Ensure Developer Mode and Device Portal in your HoloLens settings is set to ON to allow for side loading.
3. Register your HoloLens devices (see guide section below).
4. Click 'Devices' on the left panel of the MRx Console. Click 'Install' next to the registered device.

REGISTERING DEVICES

Ensure your HoloLens is on the same network SSID as your laptop / PC.

We recommend assigning static IP address for your devices.

1. Launch MRx Console on your laptop/PC.
2. Click 'Devices' on the left panel.
3. Click 'Add Device'.
4. Enter the device name, IPv4 address and portal access credentials.
5. The device will appear on the list. When registration is successful, the device status will be shown as Online and Credentials OK.

UPLOADING ASSETS

1. Launch MRx Console on your laptop/PC.
2. Click 'Assets' on the left panel.
3. Enter a name for your asset group and click 'Create Asset Group'.
4. Click 'Add Asset' to upload assets into the asset group.

SUPPORTED FILE FORMATS.

3D models: fbx

2D images: jpg, png

Video: mp4

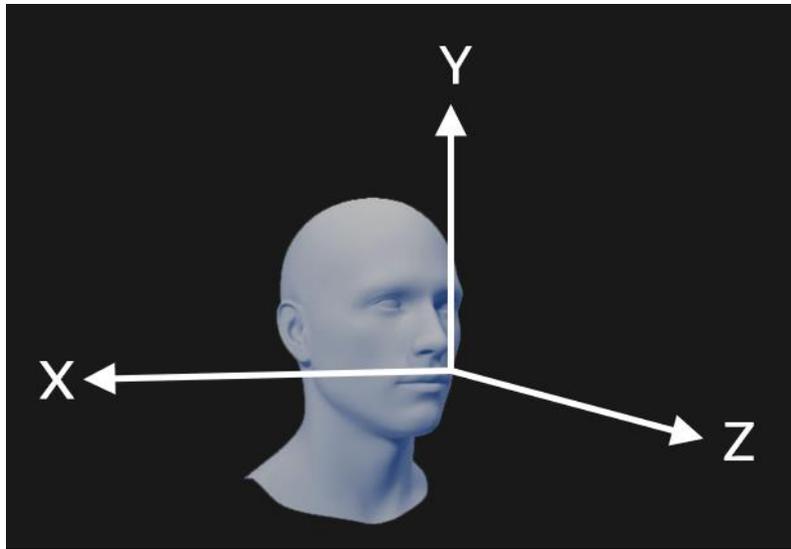
PREPARING 3D (.fbx) ASSETS

1. Check scale and pivot point (unit is in meter).
2. One material per mesh.
3. One texture per mesh.
4. One normal map per mesh.
5. Transparency is supported
6. Pack resources into the fbx file.

MODEL OPTIMIZATION.

1. Triangulate.
2. Use per-vertex normal.
3. Use per-vertex UV.
4. Use binary FBX.

COORDINATE SYSTEM.



CREATING SIMULATIONS

1. Launch MRx Console on your laptop/PC.
2. Click 'Simulations' on the left panel.
3. Click 'Create Simulation'.
4. Enter simulation information and select the asset groups you want to use in your simulation. Click 'Next'.
5. Click 'Launch Session'. This launches the Session Manager window.
6. On Session Manager, click 'Step Planner' to pre-organize your simulation or 'Skip'.
Note: Step Planner use is optional. If you skip Step Planner the first time, it will not be available when editing the simulation in the future.
7. Launch MRx on the HoloLens to join the session
8. Select new or last saved space on the Session Manager.
9. Place the anchor on the ground, air tap to lock in place.

RUNNING LOCAL SESSIONS

1. Launch MRx Console on your laptop/PC.
2. Click 'Simulations' on the left panel.
3. Click the 'Launch Local Session' for the desired simulation.
4. Click 'Launch Session'. This launches the Session Manager window.
5. Launch MRx on the HoloLens and join the session.
6. Select new or last saved space on the Session Manager.

7. Place the anchor on the ground, air tap to lock in place.
8. Launch MRx on other HoloLens to join the session.
9. When all participants are in the lobby, click 'Start' on the Session Manager.

SHARING SIMULATIONS (for Remote Sessions)

A Microsoft account will be required.

1. Launch MRx Console on your laptop/PC.
2. Click 'Simulations' on the left panel.
3. Select the simulation to upload and click the 'Upload' icon .
4. Click the 'Uploaded Simulations' tab. Log in panel may appear if you are not signed in.
5. Click the 'Share' icon  for the desired simulation.
6. Input participant emails to send download link.

Invited participants will receive an email with a link to download the simulation.

HOSTING REMOTE SESSIONS

A Microsoft account will be required.

1. Launch MRx Console on your laptop/PC.
2. Click 'Simulations' on the left panel.
3. Click the 'Uploaded Simulations' tab. Log in panel may appear if you are not signed in.
4. Click the 'Host Remote Session' for the desired simulation.
5. Click 'Launch Session'. This launches the Session Manager window.
6. Launch MRx on the HoloLens and join the session.
7. Select new or last saved space on the Session Manager.
8. Place the anchor on the ground, air tap to lock in place.
9. Launch MRx on other HoloLens to join the session.
10. When all participants are in the lobby, click 'Start' on the Session Manager.

Remote participants will join the session at the lobby and appear as avatars.

JOINING REMOTE SESSIONS

A Microsoft account will be required.

MRx is installed on laptop/PC and HoloLens.

1. Click on the link in the invitation email and click 'Download Simulation' on the webpage.
2. Launch MRx Console on your laptop/PC.
3. Click 'Join Sessions' on the left panel.
4. Click the 'Join Remote Session' for the desired simulation.
5. Click 'Launch Session'. This launches the Session Manager window.
6. Launch MRx on the HoloLens and join the session.
7. Select new space on the Session Manager.
8. Place the anchor on the ground, air tap to lock it in place.
9. Launch MRx on other HoloLens to join the session.
10. When all participants are in the lobby, click 'Start' on the Session Manager.

Remote participants will join the session at the lobby and appear as avatars.