



Optimize Content and Resolve 3D Asset Issues - Detail Page

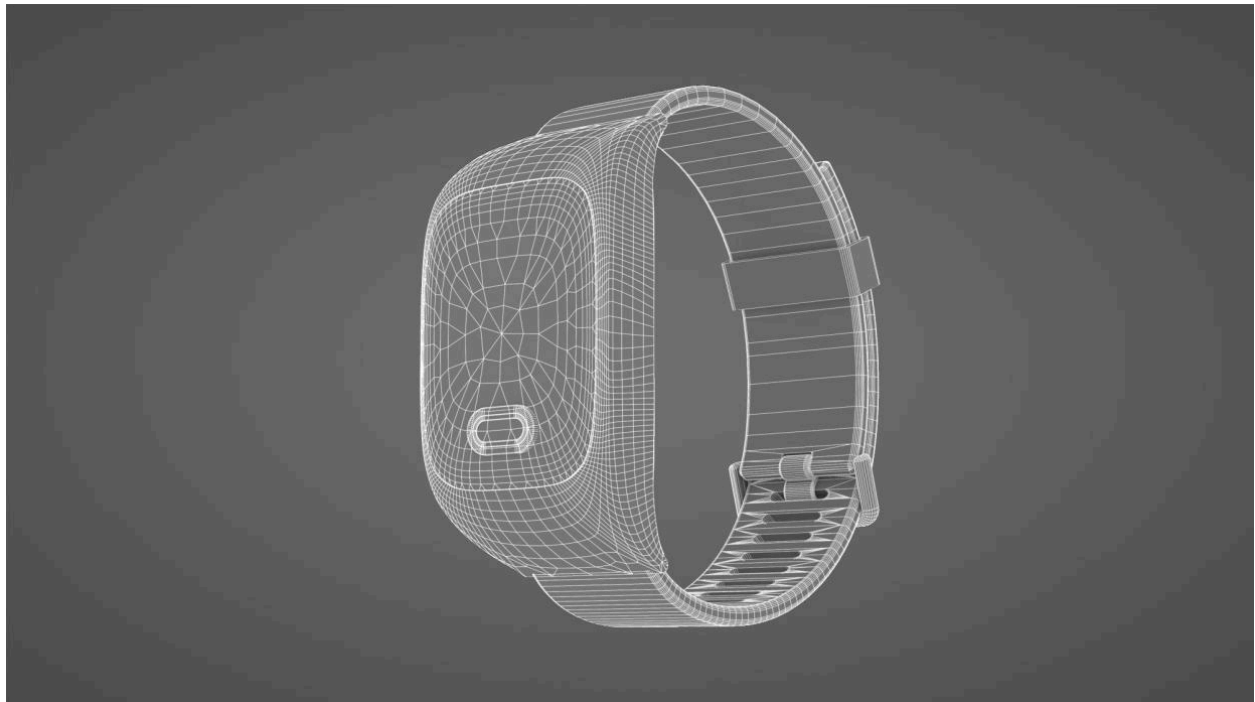
Optimize Content & Resolve 3d Asset Issues

- Why should I Optimize my Assets
- What makes a 3D Asset “optimized”?
- How do I optimize my 3D asset?
- Other Asset Issues
- Additional Resources

Optimize Content and Resolve 3D Asset Issues

Answers to common issues you may encounter with how your content appears in the Trace App

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Why Should I Optimize My Assets?

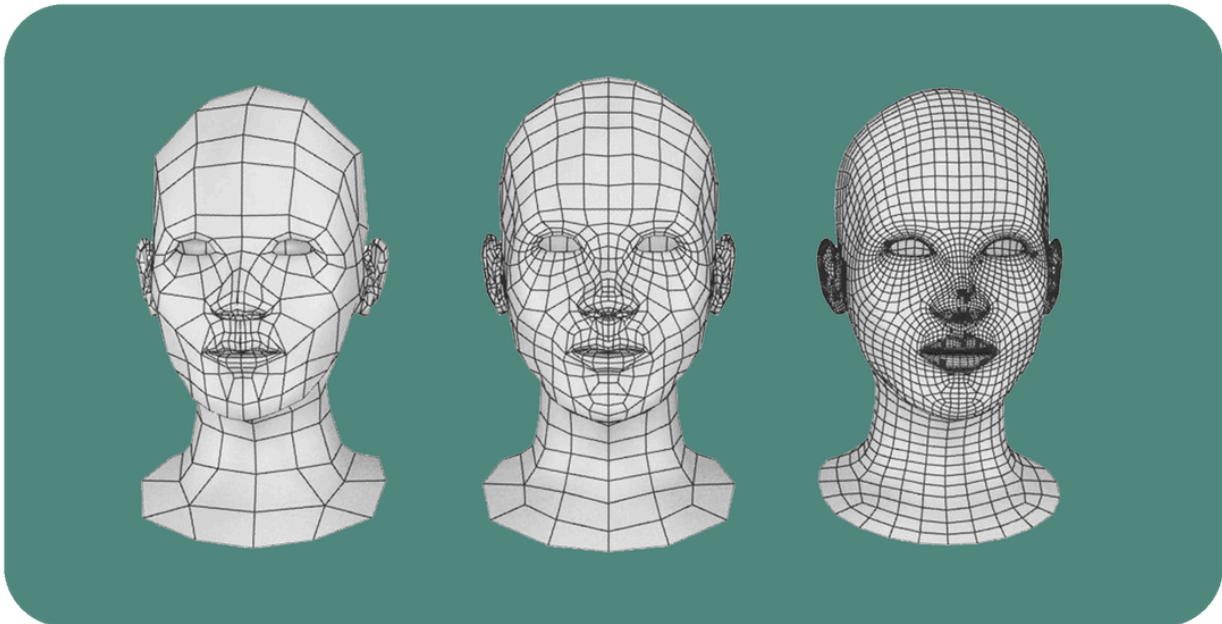
Optimizing assets is crucial to ensuring a smooth AR experience on both phones and dedicated AR devices. Unoptimized assets can lead to issues such as:

- Low Frame Rate - causes digital graphics to not properly “stick” to the real world
- Draining Battery Life - Overly demanding graphics cause a drain on battery
- Out of Memory Crashes - Loading too much content causes app instability
- Loading Times - Large files causes users to wait while devices load the content
- Network Speeds - Poor connections will not download larger experiences

What makes a 3D Asset “optimized”?

In order to understand why a 3D asset might be causing the issues mentioned above, it is good to understand what the best case scenario is for a 3D asset in Trace:

- Lower Poly Count
- Lower Resolution Textures
- Lightweight Asset Density (grouping of objects)
- Lower File Size (the end goal)



How do I optimize my 3D asset?

Now that we have an idea of what an ideal 3D asset is, let's go over some of the tools and methods you can use to optimize your 3D asset:

- Reducing Polygon Count
 - There are tools out there that can significantly reduce your asset's poly count. [Rapid Pipeline](#) is a useful tool to achieve that goal with customizable targets to give you the best balance between detail and app performance.
- Reducing Texture Resolution
 - If you have access to the 3D asset's textures, you can utilize an image editing software such as Photoshop, Clip Studio Paint, Gimp, etc. to lower the texture resolution. If you do not have access to the texture files (stored in a .glb) then you can use an optimizer like [Rapid Pipeline](#).
 - Baking higher fidelity texture detail into a lower resolution texture can help with maintaining the level of detail you desire.
- Lowering Asset Density
 - If your 3D Asset has multiple objects that are grouped together, it might help to spread these objects apart using a 3D software such as [Blender](#)
- Reducing File Size
 - If you take the steps above, you should have a 3D asset with a much lower file size as a result.

Other Asset Issues






Though many issues can arise out of 3D assets being unoptimized, there are a few issues that can happen due to other factors. Here are those issues along with some solutions:

- Placement of the asset does not line up with the floor indicator.
 - We recommend first walking around the asset to identify the root cause.
 - Setting the Scene in an open space ensures there will be less colliding with other surfaces in your Scene.
 - The asset could potentially have a pivot point that is away from the center. This is baked into the file and thus needs to be evaluated in an app like [Blender](#) to reposition the asset.
- Unable to grab the asset.
 - Each asset is given a Bounding Box when put into Trace. This is determined by the size of the asset. Making sure the assets size is not too large or small can solve this issue
 - Overlapping Bounding Boxes can create a conflict on what to prioritize when tapping an asset. Try to place objects further from one another to help reduce the chance of it occurring.
- The scale of the asset is either too large or too small
 - You can manually adjust the Scale of an asset by pinching the screen.
 - If the asset loads in as too large or small, you might have to evaluate the asset in an app like [Blender](#) to see how large it is.
 - Using this [Scale Reference](#) can help you understand how large or small an asset really is.
- Asset is not playing the intended Animation

- Using a [.glb viewer](#) to verify if the animation works or not is recommended before uploading the asset to Trace.
- Videos stuttering during Playback
 - This is usually a symptom of a high resolution video or poor data connection. If it is the former, please reduce the Video resolution with a program like Media Encoder.
- Materials not displaying correctly
 - Using our Content Management Website to verify the model is displaying materials correctly can identify the issue.
 - Using 3D software such as [Blender](#) to manually change the material to be compliant with [GLTF](#) can solve this issue.
- Flickering Models
 - Verify within a 3D software that the individual Polygons of your 3D assets are not overlapping with one another. If it is the case, manually delete the overlapping faces.
 - Verify that the 3D asset is centered properly as certain viewing angles on an off-centered asset can cause flickering.
- Too many Objects on screen
 - Modern AR hardware can handle many objects but, going past 1000 objects will most likely negatively impact performance.
 - Merge objects together using a 3D Software like Blender.

Additional Resources

For more Trace support, explore these overviews:

-  **Best Practices for AR Graphics** – Ensure assets are optimized for AR.
-  **Quick Start Guide** - Simple steps to kick off your journey with Trace
-  **Trace Creator App Features**– Deep dive into AR content creation on Mobile
-  **Trace Studio Features** – Manage projects, assets, and publishing.
-  **FAQ** – Find answers to common questions about using Trace.

Ensure your assets are optimized for smooth performance and high-quality AR experiences!