Installation

- 2019.4 with Legacy VR packages is very stable and I recommend starting there for beginners.
- 2020 is also a fine option (in regards to Hurricane Compatibility) using the XR Plugin Management System for Oculus and WMR devices, and optionally SteamVR + OpenVR Loader for all devices.

Unity 2019.4 Legacy Oculus and OpenVR

- 1. Import the HurricaneVR Asset from the Package Manager.
- 2. Install the following packages depending on your desired target platforms.
 - 1. Oculus Desktop
 - 2. OpenVR Desktop
 - 1. Follow the **SteamVR setup** steps.
 - 3. TextMesh Pro
 - 4. XR Legacy Input Helpers
 - 5. Oculus Android (for Quest builds)
 - 1. You will get a black screen in Quest build if you don't install this package.
- 3. Complete the **Project Setup** steps.

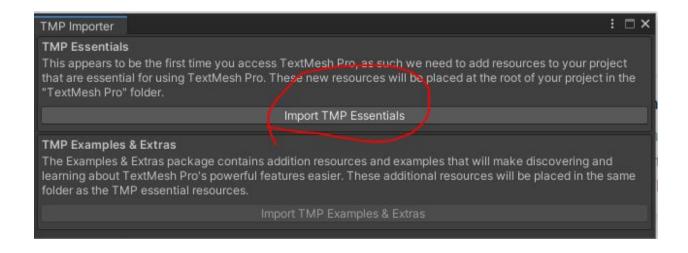
XR Plugin Management

- 1. Import the HurricaneVR Asset from the Package Manager
- 2. Install the following packages from the Package Manager depending on your target platforms.
 - 1. XR Plugin Management
 - 2. Oculus XR Plugin
 - 3. Windows XR Plugin
 - 4. OpenXR Plugin (2020.2+)
 - 5. SteamVR Plugin (from the asset store)
 - 1. The recent version of this asset installs the OpenVR XR Plugin Loader.
 - 2. Follow the **SteamVR setup** steps.
 - 6. TextMesh Pro
- 3. Complete the **Project Setup** steps.
- 4. Enable the Plug-in Providers under ProjectSettings XR Plugin-Management

TextMesh Pro - Example Scene

The Example scenes provided make use of TextMesh Pro for high quality text in VR.

The font sizes most likely will load as the default (36) when you open the scene. Do not save the scene and press "Import TMP Essentials" when prompted. Perform a reimport-all after to fix this.



Setup

Tags and Layers

- 1. Player used to prevent collision with the player character controller.
 - 1. Assign to the PlayerController object (be careful not to assign to the children)
- 2. Grabbable used to help prevent collision with the player character controller and is automatically assigned recursively to objects with HVRGrabbable components.
 - 1. Automatic layer assignment can be disabled per grabbable with by setting AutoApplyLayer to false.
 - 2. Automatic layer assignment can be toggled at the project level on the HVRSettings scriptable object.
- 3. Hand used on the hand collision geometry
 - 1. Set the objects with your hand colliders to this layer

- 4. Left Target / Right Target Used for the auto posing grab sequence to ensure the fingers only collide with the desired object.
 - 1. Automatically set in code during the auto pose sequence, no need to assign these to any objects.



Time

Update the Fixed Timestep to 1/90 for PC builds and Quest 2 if you override with OVR and 72 for Quest.

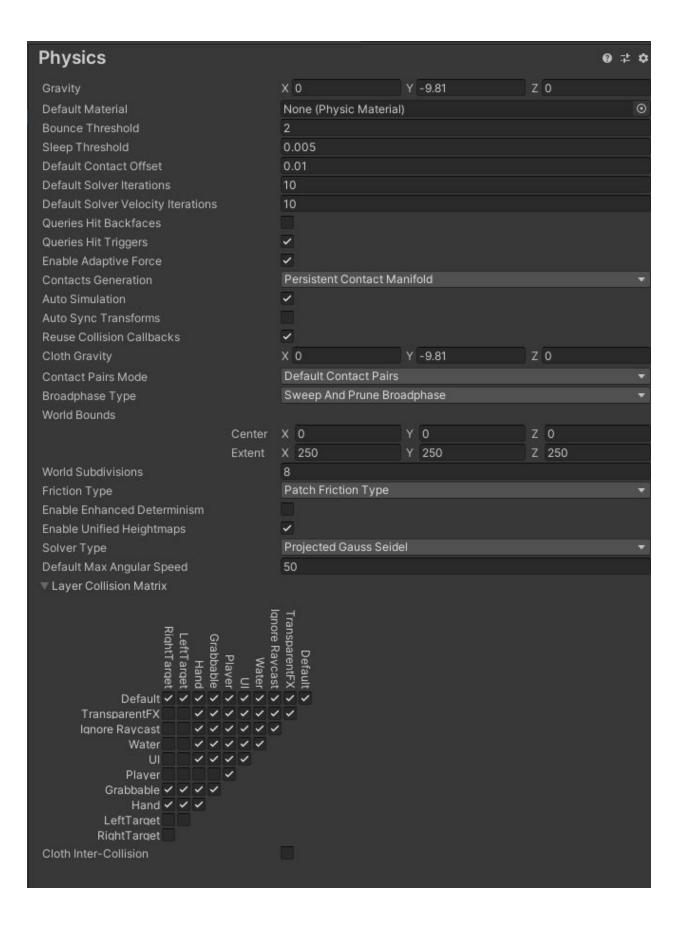
I'll be looking into adding logic to automatically updating this at run time dynamically in the future.

Physics Settings

Notable Properties:

1. Default Solver Iterations

- 2. Default Solver Velocity Iterations
- 3. Default Max Angular Speed
- 4. Enable Adaptive Force
- 5. Layer Collision Matrix



Line of Sight Layermasks

The hand and force grabber components test for line of sight to determine if the object is allowed to be grabbed.

Adjust the layers on the HVRHandGrabber and HVRForceGrabberBag components like below. If you have objects on different layers that you wish to block grabbing with line of sight, add them here as well.

- 1. HVRHandGrabber Raycast Layermask
 - 1. Located on the LeftHand and RightHand objects under the Rig
- 2. HVRForceGrabberBag Layer Mask
 - 1. Located under the LeftHand and RightHand objects, there currently are 5 by default.

