

UNITY ENVIRONMENT SETUP FOR ARCONNEX 3D AR PRODUCTION

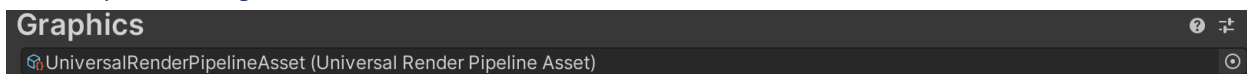
UNITY VERSION 2020.3.11 LST

INSTALL THE FOLLOWING PACKAGES

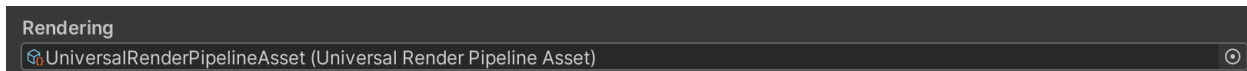
- Universal RP 10.5.0 (Package Manager - Unity Registry)
- Asset Bundle Browser 1.0.7 (Package Manager – Add from Git URL)
<https://github.com/Unity-Technologies/AssetBundles-Browser.git>
- TextMeshPro (Package Manager - Unity Registry)
Import TMP essentials and Import TMP Examples and Extras
- ARConnexStarter_v1.1.0.unitypackage (*Assets>Import Package>Custom Package*)
available at https://arconnex.com/codeless-3d-augmented_reality_tutorials

SETTING UP THE UNIVERSAL RENDER PIPELINE (URP)

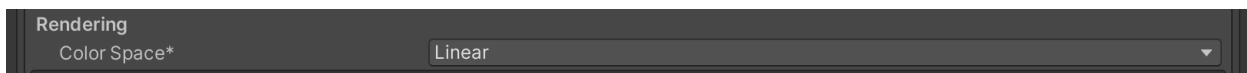
Included in the ARConnexStarter_v1.1.0.package is a folder RESOURCES/URPIPELINE with the **Universal Render Pipeline Asset**. Open Project Settings, *Edit>Project Settings>Graphics* and placed this asset into the *Scriptable Render Pipeline Settings*.



Open Project Settings, *Edit>Project Settings>Quality* and placed this asset into *Rendering*



Open Project Settings, *Edit>Project Settings>Player/Other Setting* Change Rendering Color Space from Gamma to **Linear**



SEE THE "SETTING UP YOUR UNITY ENVIRONMENT" VIDEO TUTORIAL TO LEARN MORE

THE ARCONNEX STARTER PACKAGE

The ARConnex starter includes an `ARCONNEX_RESOURCES` folder and a Content Folder `NEFERTITI_EXAMPLE_PREFAB` with an Example 3D experience.

ARCONNEX_RESOURCES FOLDER INCLUDES

- **ARConnex Starter Scene**
Scene has a Camera that includes the Event System, Physics Raycaster and Audio Listener components so that the editor emulates the components in the Reality Browser. It shows the Size Reference and has the interactive Nefertiti_Example_Prefab – Watch the ARConnex Starter Scene video tutorial to learn more.
- **Helper Component** (to control Reality Browser features and extend interactive capabilities).
- **Helper Materials** (materials to cast shadows, create portals and setup cloud delivered video in 3D AR).
- **Size_Reference_Prefabs** (a set of prefabs for setting content to real-world scale when experiences are placed into the audience's environment using Reality Browser's Ground Plane recognition).

ARConnex supports both Prefab and Scene Asset Bundles

Most interactive experience can be created using **Prefab** AssetBundles.

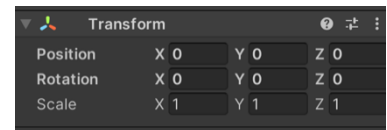
Experiences using Baked Lighting or Timeline must be created as **Scene** AssetBundles.

IMPORTANT: Prior to building scene-based Asset Bundles, de-active the Event System, Physics Raycaster and Audio Listener components as they are already included on the ARCamera in the Reality Browser Application.

ASSETBUNDLE NAMING CONVENTION



New experiences begin with Empty GameObject with its Transform reset so it is centered in world space.



This will be the Parent of your content hierarchy and become the Prefab that you will save as iOS and Android AssetBundles for upload to ARConnex. The name of your prefab must match the name of your AssetBundle. This name is input into the Create AR form when uploading.

The **NAME OF THIS PREFAB MUST BE UNIQUE**, we recommend a 3-part naming convention for all 3D AR experiences.

Name Example: **PropelAdvancedRacingBike-a34dfqcki-001**

readable name - a random string of 4-8 alphanumeric characters - a numeric value incremented when revised

Upon a revision, both Prefab and AssetBundle names are renamed to increment the numeric value, then built.

Name Example: **PropelAdvancedRacingBike-a34dfqcki-002**

This will ensure your AssetBundle name is unique and can easily stay unique with each revision by incrementing the numeric value on both Prefab and Assetbundle names. At the same time, it aids audiences in retaining the experience content in the Reality Browsers cache for fast loading.

[SEE THE "CREATING 3D ASSETBUNDLES" VIDEO TUTORIAL TO LEARN MORE](#)