

Documentation & Quick Start



Thank you!

Thank you for choosing this pack! We hope you create something really special with it.

*Please consider rating the package through your download list or leave a review at the store page once you're familiar with it.
Feel free to give us feedback via E-Mail info@tidalflask.com
or our social media!*

*Your feedback helps us focus on the right updates for the future
which will be free for existing users!*

*Enjoy, your **Tidal Flask** team!*





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Quick Start

Importing to Built-in RP project

After importing the Standard version into your project 2021.3.20 & above, which doesn't use any of the Scriptable render pipeline packages (URP/HDRP), it should just work™. If you see any warnings in the Console window, try the Clear button and/or relaunch Unity. If the warnings don't disappear consult the FAQ or drop us an e-mail. If you see any pink assets inside the Project window or in the scenes, simply select said asset -> right click -> Reimport and it should fix it. If you still encounter pink shaders, please make sure you have the correct pack version installed and that you are using a Unity version that is compatible with the pack.

Make sure you have Post Processing installed from Unity's Package Manager. If you install it after you imported the pack, reload the demoscene to get rid of possible errors.

Importing to URP project

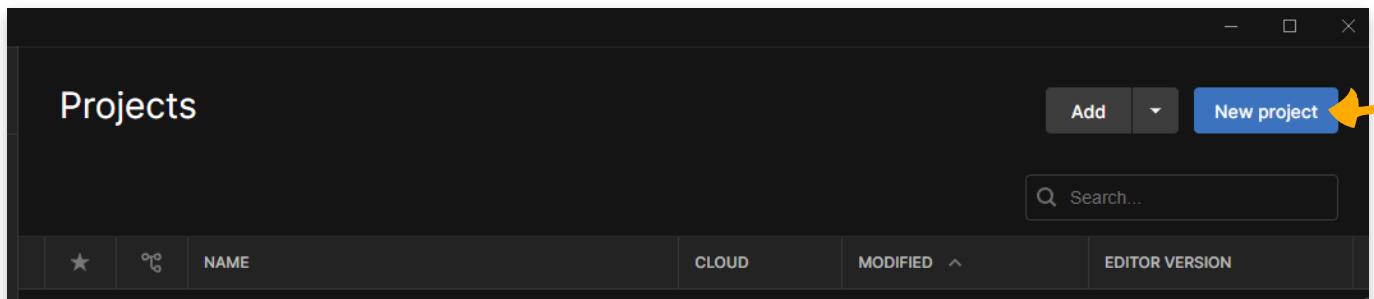
Here you will find detailed steps on how to import the package. Please note that this package only works out of the box with Unity 2021.3.20 and above.

IMPORTANT: In case you are using the new URP shaders with a Unity version older than 2021.3.20 please be aware that this might result in shadow cascade errors in the scene. To solve the problem you can either use the shaders from the /shaders/legacy folder or set the Cascades option in your render pipeline asset to "No Cascades".

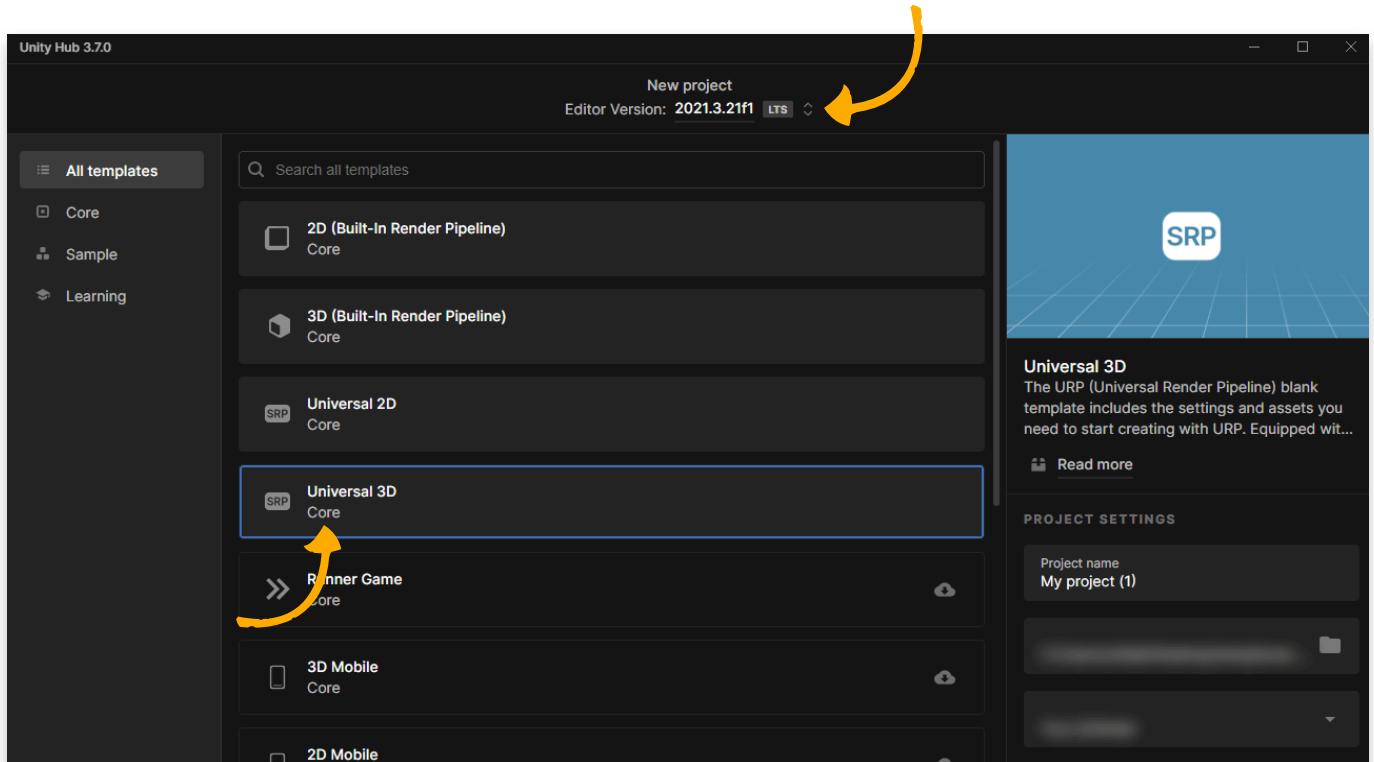


How to set up your project for URP (option 1)

We recommend to create a clean project and install the URP via the Package Manager or via Templates and import our package to this project.
To do so follow the steps below:



Step 1: Click “NEW” to create a new project (for URP pick Unity 2021.3.20 or above).



Step 2: In the “Templates” select “Universal 3D”, this way everything you need for this package will be preinstalled.



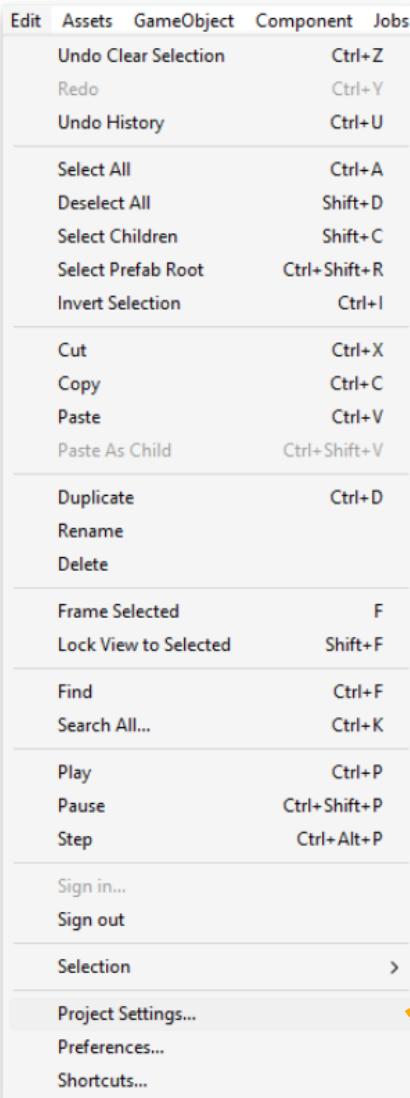
Step 3: Download the pack from the Asset Store and install the URP version.
At this point you already can go to the scenes folder and select any of the scenes.

If you see any errors in the “Console”, try the “Clear” button. If the errors don’t disappear consult the FAQ or drop us an e-mail.

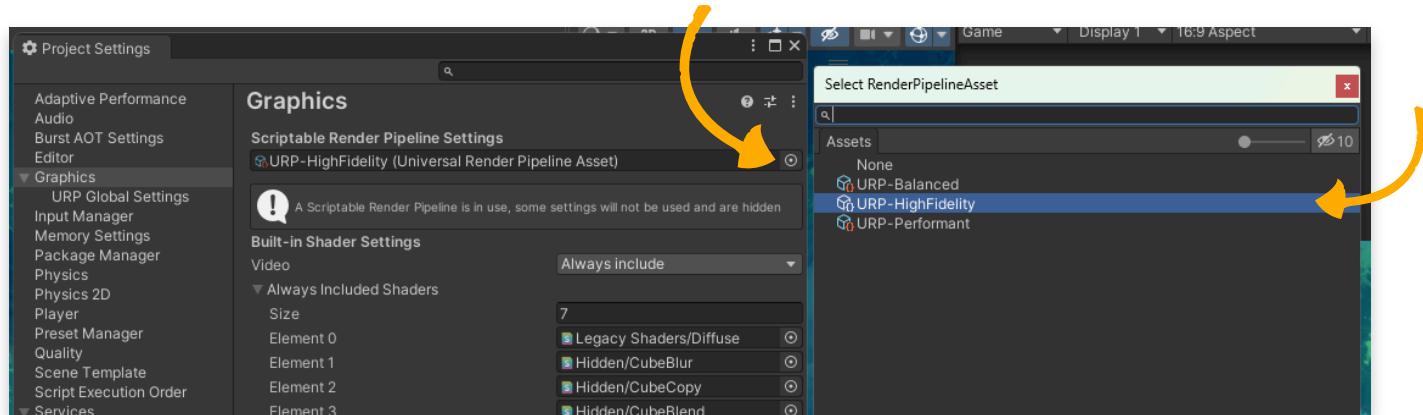
Note: If the error message “*a tree couldn’t be loaded because a prefab is missing*” pops up in the console tab, simply press “Clear” in the “Console” tab and it won’t appear again. This is a known Unity bug (importing a package that has terrain and trees in it) and has nothing to do with the package.

If you see any pink assets inside the Project window or inside the “Terrain”-object in any of the scenes, simply select the said Prefabs (inside the prefabs folder) or the Meshes (inside the 3d folder) > right click > Reimport and it should fix it.

If you still encounter pink shaders, please make sure you have the correct pack version installed, depending on the render pipeline you are using.



Step 4: After the project is loaded, go to Edit > Project Settings...

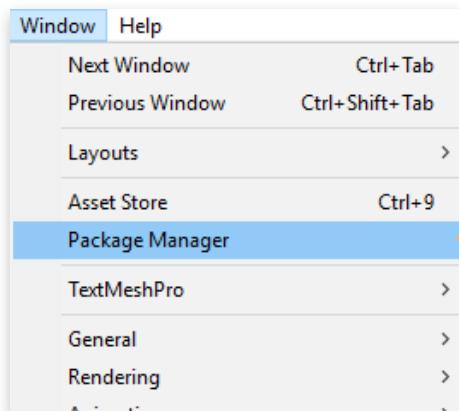


Step 5: For the Scriptable Render Pipeline Settings select “URP-HighFidelity”. These are the presets Unity preinstalled with the Template.

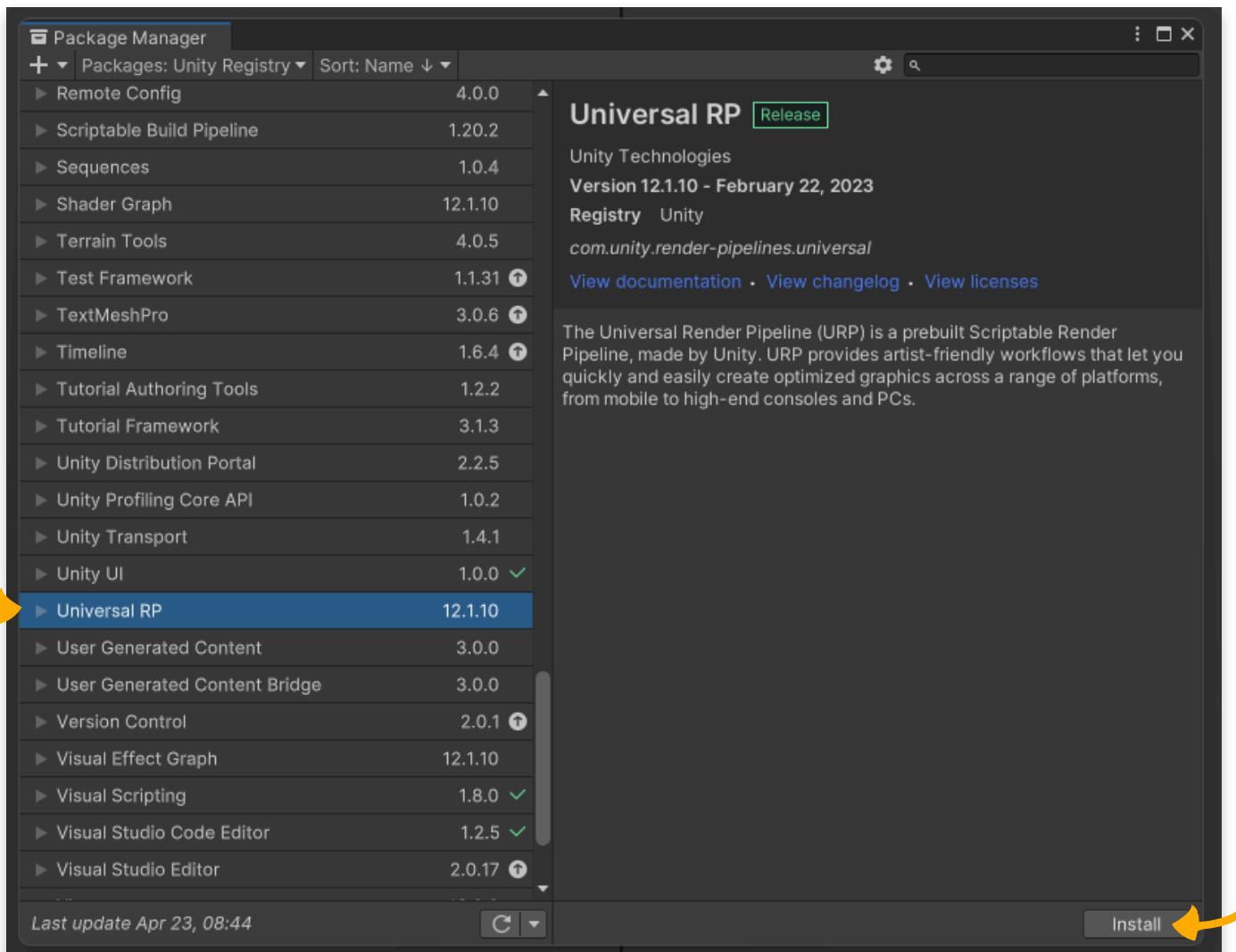


How to set up your project for URP (option 2)

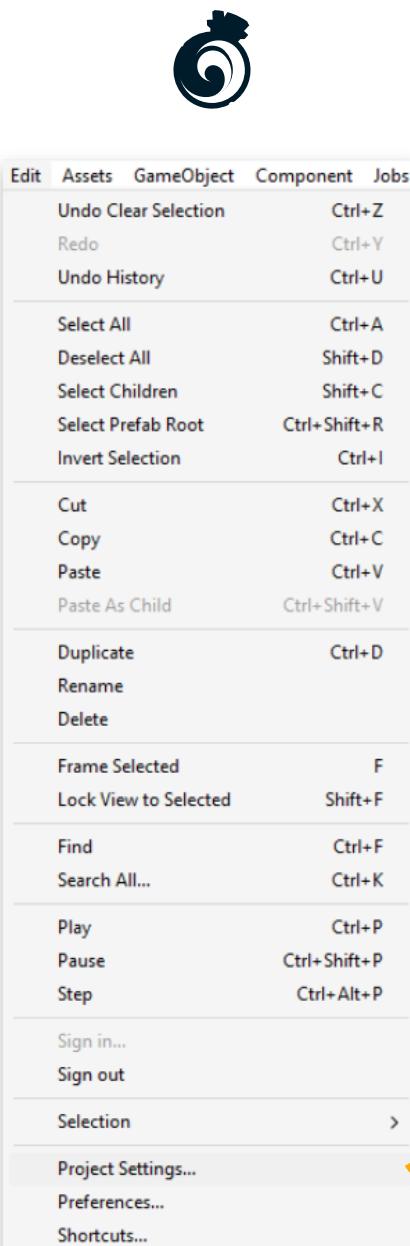
If you imported the the pack before you installed the URP please follow the steps below:



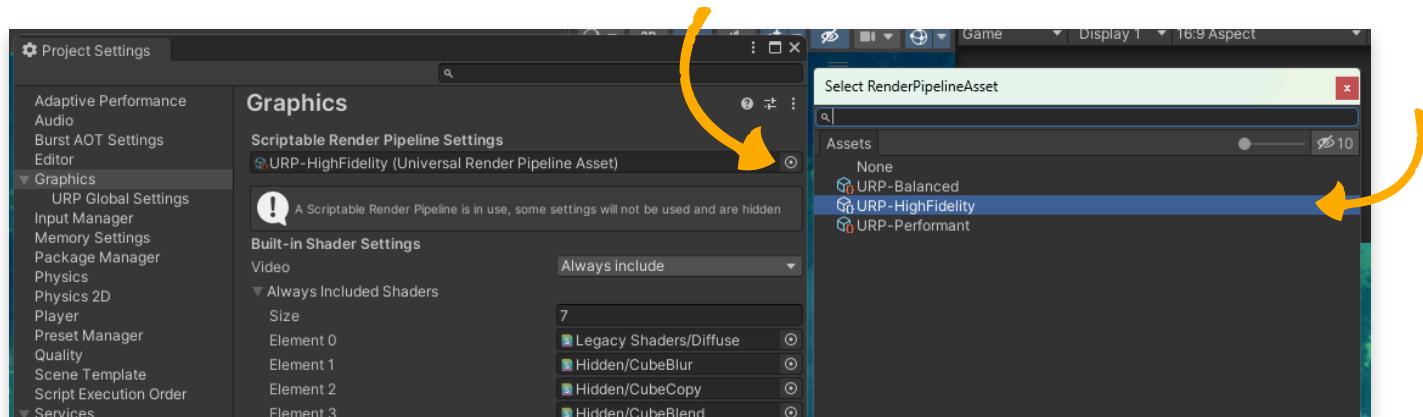
Step 1: go the Window > Package Manager.



Step 2: Select “Universal RP” asset and click “Install”.



Step 3: After the project is loaded, go to Edit > Project Settings...



Step 4: For the Scriptable Render Pipeline Settings select “URP-HighFidelity”. These are the presets Unity preinstalled with the Template.





Demo scenes

Demoscene_fantastic_nature_day: daylight scene with different sceneries

Demoscene_fantastic_nature_night: night scene with the same sceneries like the daylight scene

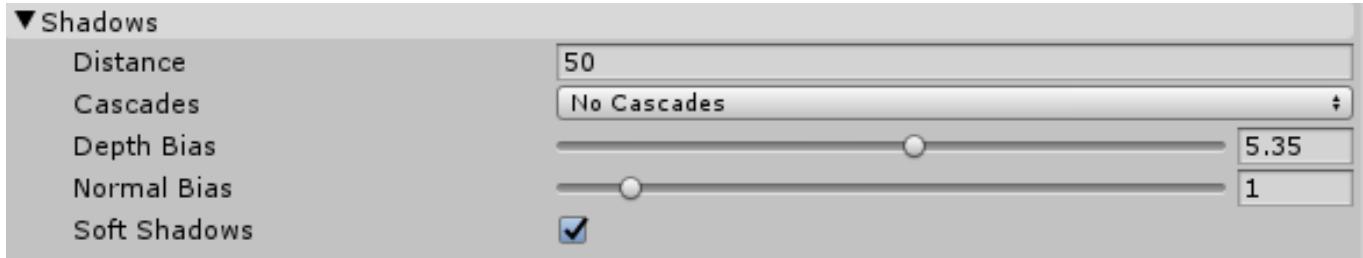
Demoscene_fantastic_nature_assets: in this scene you will find all the assets within the package

All the sceneries you see in the trailer were recorded directly out of these 2 scenes.

Simply select the different displays from the dropdown to see where the cameras were placed:

Quality settings for URP

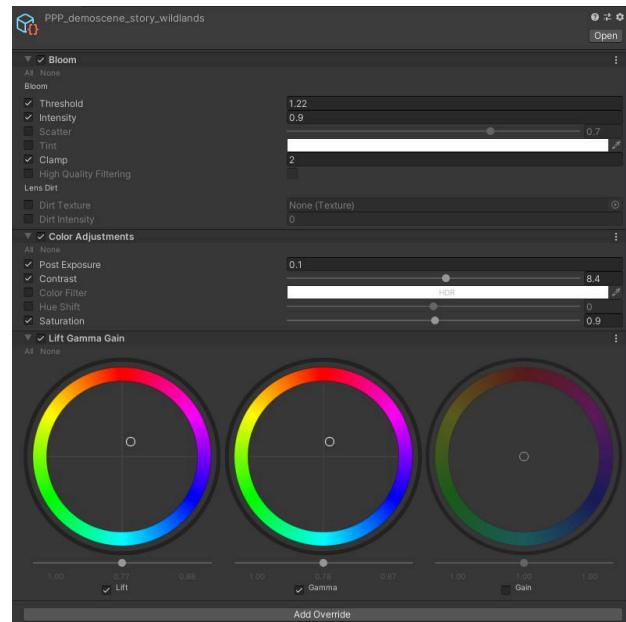
To quickly adjust any quality settings for URP please find the UniversalRP-HighQuality asset inside the \Assets\Settings folder.



Example settings for shadows

Post Processing

Inside the \Fantastic Nature Pack\Settings folder you will find PPP_ files for the demo scenes. There you can adjust the postprocessing to your liking.



The post processing settings.



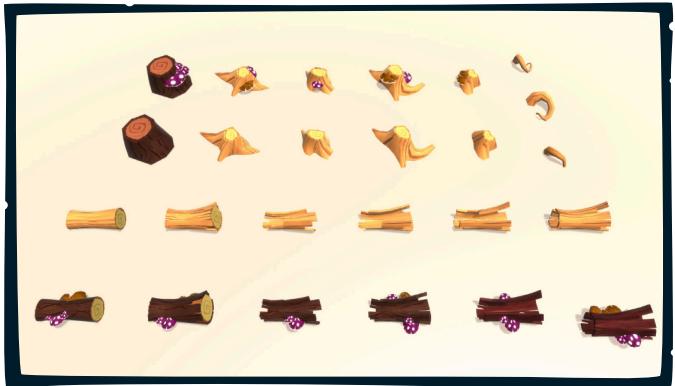
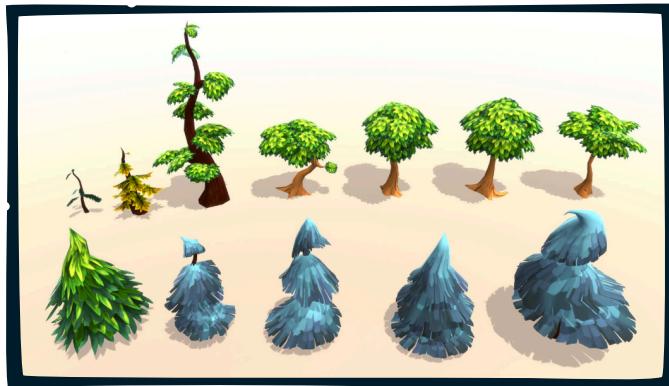
Demoscene day & night





Demoscene assets

In this scene you will find all the assets within this package.





Assets

Meshes

Vertex maps

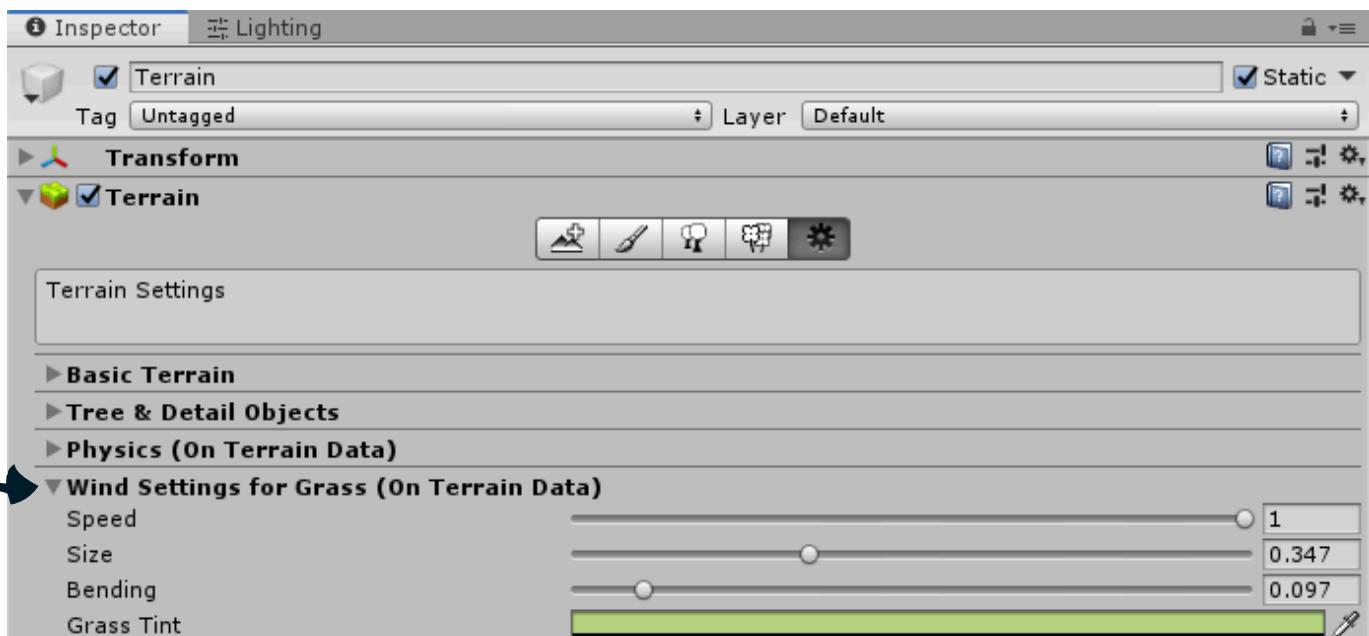
A specific set of meshes have vertex maps to be able to work with “Wind settings for Grass”. If you are asking yourself why we added these assets to “Detail Objects” please read through Environment setup - Terrain Tool chapter.

The following set of assets have vertex maps:

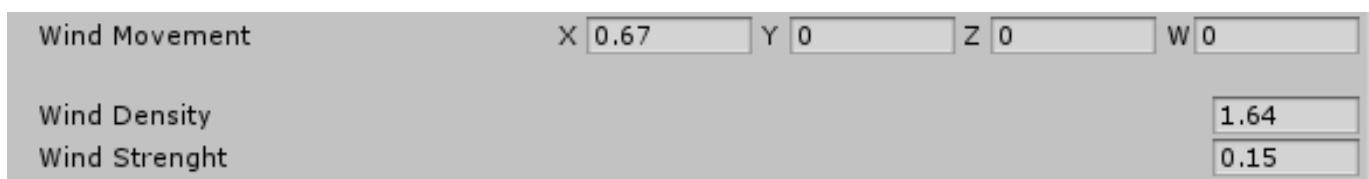
SM_ENV_PLANT_bush_...

SM_ENV_PLANT_flower_...

SM_ENV_PLANT_leaf_...



Set the desired wind movement of the assets with vertex maps under
“Wind settings for Grass”



For trees and grass the wind simulation is solved with the shader. For more information please see chapter “Shaders”



LODs

All the trees and stones have 3 LODs levels. These are already set up for you inside the corresponding prefabs. You will find all the prefabs in \prefabs folder.

Highest polycount for trees LOD0: 964

Lowest polycount for trees LOD2: 19

Highest polycount for stones LOD0: 872

Lowest polycount for stones LOD2: 18

Collision

The trees have a custom collision mesh called `*treename*_COLLISION`.

The stones have their `_LOD1` or `_LOD2` set as their collision.

Since trunks, stumps and roots are rather low poly, they have a mesh collider referencing themselves.

Lightmaps

All assets have a custom lightmap UV in the second channel.



Textures & Materials

You can find all the textures in the \2d\textures folder. The materials are in the \materials folder.

Tileable materials

To adjust the look of the terrain materials, please adjust the terrain layers directly in this folder:

\2d\textures\terrain_layers

There are different classes of materials and textures in this pack depending on its use:

- Tileable materials (wood, metal, etc.)
- Terrain textures (gravel, grass, sand, etc.)
- Atlases (props, foliage)
- FX (fire, steam, water)

There are multiple reasons why we wanted the plants texture to be an atlas.

Firstly for performance reasons and secondly, this way you can easily add seasonal changes by simply changing one single texture, or add other kind of flora and fauna to the same meshes without adjusting the mesh or the UVs.



Shaders

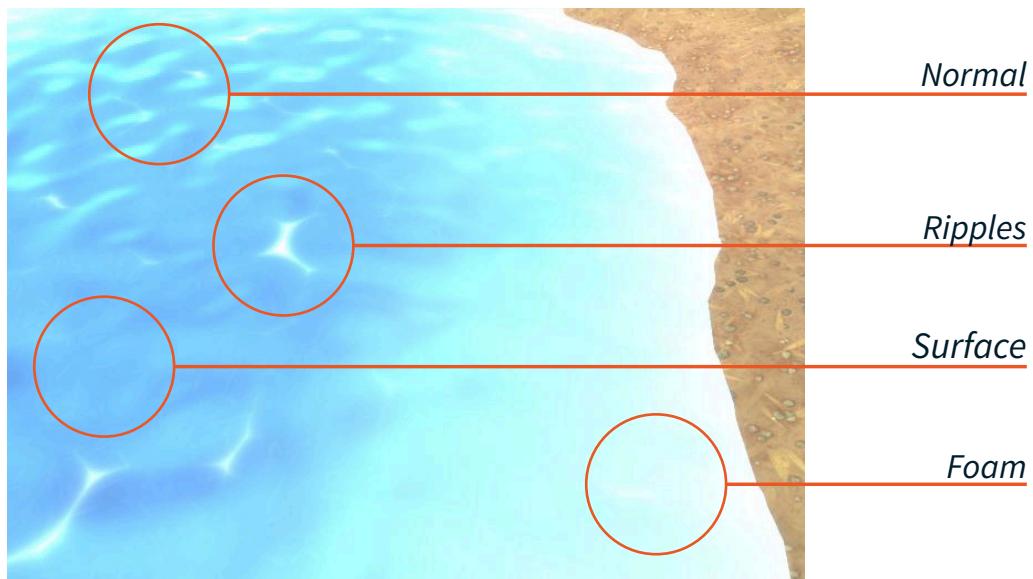
With package version 1.5 the wind and water shader have been improved. They were created using Amplify and hence can **not** be opened or adjusted using Unity's Shader Graph. Of course if you have Amplify installed, you can adjust the shader there. The older version of the wind and water shader for URP can still be found in the / shaders/legacy folder.

Rest of the shaders are all standard URP or Built-in, depending on which render pipeline you are using.

Water shader

The water material is defined by four main parts:

- **General Surface:** Defines color and opacity of the surface
- **Normal:** Defines the Normal of the water surface
- **Foam:** Creates a foam effect where meshes intersect with the water
- **Ripples:** Defines the ripple like highlights on the water surface



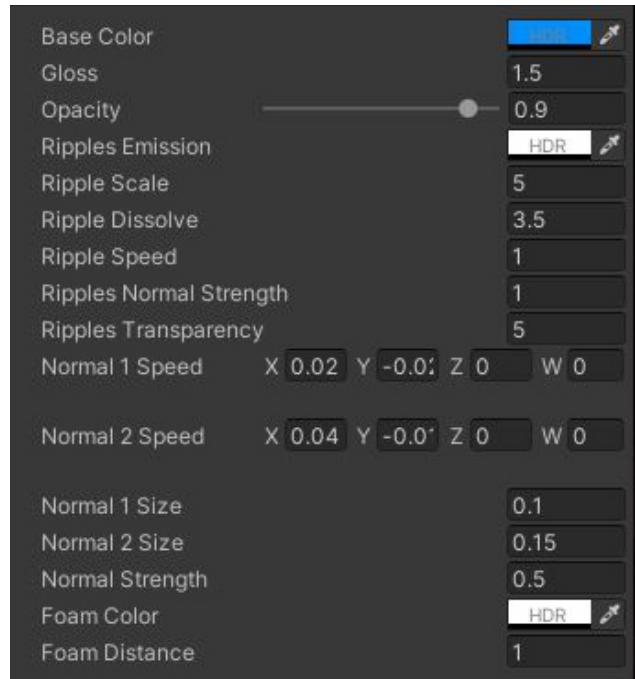
The four main parts of the water shader: Normal, Foam, Ripples and Surface.

- Important note: If the water isn't displayed correctly, make sure you have enable "Depth Texture" in your Render Pipeline Asset and play around with the shadow cascades in case you are experiencing shadow issues with the water.
- If you are applying the water material to a new plane, make sure to turn off "Cast Shadows" in the inspector window of the plane.



To customize the water shader you have the following options:

- Base Color: base color of the water
- Gloss: defines surface gloss amount
- Opacity: defines surface opacity
- Ripples Emission: Emission intensity of the ripples
- Ripple Scale: defines the scale of the ripples
- Ripple Dissolve: contrast of the noise which is used for the ripples
- Ripple Speed: defines the movement speed of the ripples
- Ripples Normal Strength: Defines height of the ripples
- Ripples Transparency: Defines how transparent the ripples are
- Normal 1 Speed: speed of the waves
- Normal 2 Speed: speed of the waves
- Normal Strength: defines height of the waves
- Foam Color: color of the foam where the meshes intersect with the water
- Foam Distance: size of the foam



The customization options inside the water material.

Foliage shader

For the foliage wind movement we have included 4 shader variations in this pack:

- S_foliage_wind_standard_advanced: doublesided shader, which is primarily used for the grass. It has a variety of options to customize the shader.
- S_foliage_wind_standard_advanced_lit: doublesided shader with the same customization option as the one above, but with front/back faces shaded influenced by light direction. It is primarily used for the tree leaves and bushes.
- S_foliage_wind_standard_simple: A simple version of the advanced shader with reduced customization options. Primarily used to improve performance.
- S_foliage_wind_standard_simple_lit: A simple version of the advanced_lit shader with reduced customization options. Primarily used to improve performance.

M_PLANT_atlas_anim_FNP and M_PLANT_grass_anim_FNP are both meant to be used for wind movement of the plants.

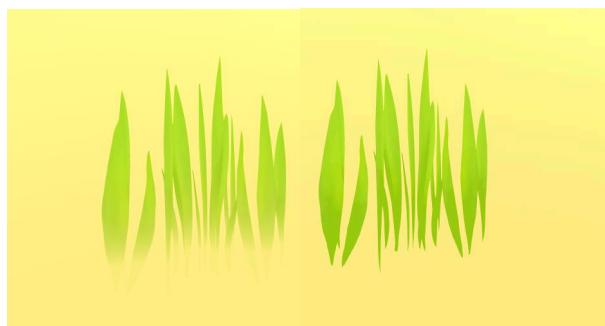


The advanced wind shader is defined by four main parts:

- **Base Color/Texture:** Defines texture and tint of the surface
- **Wind Movement:** Defines strength, scale and direction of the wind movement.
- **Ground Fade:** Defines a color fade starting at the bottom of the mesh, primarily used for the grass.
- **Wind Tint:** Creates highlights on the grass
- **Distance Fade:** Defines a distant color fade relative to the camera position.



The Wind Tint creates a pattern of highlights on the grass.



The grass mesh with and without a ground fade.



To customize the wind shader you have the following options:

- Base Texture: Slot for the foliage texture
- Base Tex Color Tint: Defines texture tint color
- Alpha Clip Value: Defines threshold when the pixel will be opaque or transparent
- Shadow Received Strength: Defines the intensity of the received shadow on the mesh (URP only)
- Ground Fade Color: Defines the color used for the ground fade
- Ground Fade Height: Defines the range of the ground fade
- Ground Fade Contrast: Defines ground fade contrast
- Use vertex color for wind: Enable this option, if you are using a mesh with a vertex map
- Wind Strength: Strength of the deformation
- Wind Scale: Defines the density of the noise applied to the mesh
- Wind Speed: Movement direction of the noise (only edit the x and y values, z and w components are not used)
- Wind Tint Opacity: Defines transparency of the tint color
- Wind Tint Contrast: Defines contrast of the tint color
- Wind Tint Scale: Size of the noise for the tint
- Wind Tint Speed: Movement direction & speed of the noise
- Distance Fade Color: Defines the color of the fade in the distance
- Distance Fade Start: Defines start of the fade relative to the camera view
- Distance Fade End: Defines the end of the fade
- Distance Fade Opacity: Defines transparency of the distance fade



The customization options inside the wind material.

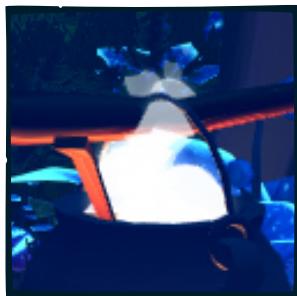


FX

Inside the \prefabs\FX folder you will find some particle effects to decorate your scenes. We added the following effects:



Fire



Steam



Particles Glow



Leaves

Customizing Assets

We have added multiple prefab versions for trees to have 4 different variation in their materials. You can easily do that for other assets like roots, tree trunks and stumps.

As explained in the “Textures & Materials” chapter, you can work on one single texture to make adjustments or even seasonal changes.





Scene setup

Environment setup - Terrain Tool

It's important to note that trees and stones will not work on the terrain as "Detail Objects". This is because they have LODs, which is incompatible. Instead, add these assets as "Tree Objects" in the Terrain Tool.

Additionaly any assets with emission and grass should be added as "Tree Objects", because the built-in grass shader would otherwise override the custom shaders.

This is not a limitation of the package, but rather a limitation of Unity. Here is a sheet to help you decide where to add the assets:

Detail Objects

Assets without emission

Assets without LODs

No prefabs

"Grass texture"

single texture (no atlas) which will be displayed as such (can be a billboard)

"Detail Mesh" - vertex lit

does not move with wind & has no transparency

- Mushrooms without emission

"Detail Mesh" - grass

assets with vertex map that should move with wind

- Bushes
- Leaves
- Flowers
- Fern

Tree Objects

Assets with emission

Assets with LODs

Prefabs

Assets with custom shaders

- Trees
- Stones
- Grass





Support

FAQ

Will there be updates to the package?

Yes. We plan to update all our packages as soon as there is a relevant update or if the community asks for adjustments.

Can you give support to users if something doesn't work?

Yes, but first please read through this document and if you still need help with something related to this package, feel free to contact us.

A list of errors shows up in a shader.

Try reimporting the shader (in project tab > right-click on the shader > Reimport). We are aware of some shader warnings showing up, which don't seem to actually break the shader. So simply clearing the warning in the console tab should fix the problem.

I opened the project for the first time and everything is pink. When I select a material, the shader says "Hidden/InternalErrorShader"

This is the case when your project doesn't use the same render pipeline as the pack version you installed. Starting on page 4 you will find all the steps needed to properly set up your project.

I opened the project for the first time and in the Console I get the error "A tree couldn't be loaded because the prefab is missing"

This is a known Unity bug (importing a package that has terrain and trees in it) and has nothing to do with the package. Simply press "Clear" in the "Console" tab and it won't appear again.



I imported the package but some assets still appear pink in the scene...

Make sure you installed the correct render pipeline version of our pack. After opening a scene it's still possible, that some assets are pink. If that is the case, do the following:

- In the Hierarchy window select “Terrain”
- In the “Paint Details” tab double click on any asset
- Click on the circle next to the asset which was added in the “Detail” panel
- Re-add the same asset and the scene should look normal again

I imported the package but some assets still appear pink in the Project window...

If you see any pink assets inside the Project window or inside the “Terrain”-object in any of the scenes simply select the said Prefabs (inside the prefabs folder) or the Meshes (inside the 3d folder) > right click > Reimport and it should fix it.

I'm using Unity version older than 2021.3.20 and the scene assets have shadow errors and/or pink materials and/or the terrain isn't showing.

The new URP shaders are created in Unity 2021.3.20 and are not backwards compatible. The errors are created by the shadow cascades settings in the render pipeline asset. You can either use the shaders from the /shaders/legacy folder or set the Cascades option in your render pipeline asset to “No Cascades”.



Contact & Support

Visit our page for updates and more packages in the future:
<https://tidalflask.com/>

Contact us if you didn't find an answer to your questions:
info@tidalflask.com

Social Media



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<https://www.instagram.com/tidalflask/>

