

PERSISTENT VEGETATION STORAGE PRO

Persistent Vegetation Storage (A.W.ES.O.M	AND CONCIDENT OF	on Storage
Settings	Stored Vegetation	Bake Vegetation
Edit Vegetation	Paint Vegetation	Precision Painting
The PersistentVegetationStorage Component is designed to store baked vegetation generated from the rules in the VegetationSystem Component or from 3rd party systems. The Vegetation Item locations are stored in a scriptable object.		
Vegetation storage Storage a Per	sistentVegetationStorage_4 O	Create Storage
	agePackage object by right clicking in a pi nt Vegetation Storage Package. Then dra	roject folder and select g and drop this here.
Setup		
	Initialize persistent storrage	
Initialize persistent storrage will clear the configuration of the VegetationSystem of the Vegetati	he current storrage and configure it to sto component	re vegetation items for the current
Status Cell count: 196		

Settings Stored Vegetation Bake Vegetation Edit Vegetation Paint Vegetation Precision Painting

SETTINGS

In order to work the Persistent Vegetation Storage component needs

a **PersistentVegetationStoragePackage**. Create a new package and drag and drop it to the Storage slot in the inspector. The first time a package is added or if the package is initialized for another terrain it will ask you to initialize it. You can also press the create storage button to have one created and saved in the project folder for you.

When initialized it will work for only this terrain with the current vegetation cell size. If you change

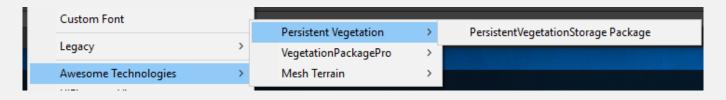


the cell size you need to initialize the storage again. This will clear all data in the storage.

Persistent Vegetation Stora AWLES.	MANZICIOISISISIA	n Storage	
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The PersistentVegetationStorage (VegetationSystem Component or finded)	The PersistentVegetationStorage Component is designed to store baked vegetation generated from the rules in the VegetationSystem Component or from 3rd party systems. The Vegetation Item locations are stored in a scriptable object.		
Vegetation storage			
Storage	PersistentVegetationStorage_4 O	Create Storage	
Create a new PersistentVegetationStoragePackage object by right clicking in a project folder and select Create/AwesomeTechnologies/Persistent Vegetation Storage Package. Then drag and drop this here.			
Setup			
	Initialize persistent storrage		
Initialize persistent storrage will clear the current storrage and configure it to store vegetation items for the current configuration of the VegetationSystem component			
Status			
Cell count: 196			

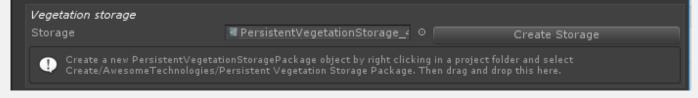
VEGETATION STORAGE

Create a Persistent Vegetation Storage Package by right clicking in a project folder and select Create/Awesome Technologies/Persistent Vegetation/persistentVegetationStorage Package and give it a name. Then drag/drop the package to the slot.



You can also have Vegetation Studio create it for you. It will be stored in the PersistentVegetationStorageData folder under Assets.





SETUP

If you change the cell size or world area of the VegetationSystemPro component you need to initialize the storage again. This will clear any vegetation instances in the storage

Setup	
Initialize persistent storrage	
Initialize persistent storrage will clear the current storrage and configure it to store vegetation items for the curre configuration of the VegetationSystem component	nt

STATUS

This shows the total cell count in the storage.

Status	
Cell count: 196	

STORED VEGETATION

This tab shows you info about all the vegetation stored in the storage.







Persistent Vegetation Storag AWLES.O.	MANCICIOISISISIA	n Storage
Settings	Stored Vegetation	Bake Vegetation
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Storage size: 0.00 mbyte Total item count: 2,233,438		
<i>Status</i> Disable persistent storage		
Select biome/vegetation package Selected vegetation package I	Default biome	
Select Vegetation Item		
Information : GrassFrond02 Use vegetation masks Instance count: 966,231		
Vegetation Studio - Baked vegetation	: 966,231	Clear instances
Cle	ear selected Vegetation Item from stora	age
This will clear all Vegetation Items fi Clear A	rom the selected biome from storage. LL items from the selected biome from	storage
Clear ALL B	AKED items from the selected biome fr	om storage
	ALL items from all VegetationPackages/I BAKED items from all VegetationPackag	

STORAGE SIZE

This is the total storage size saved on disk. The disk size only updates when you save the scene.

Total item count is the number of instances in the storage.

STATUS

You can enable/disable the persistent storage by checking this.



SELECT BIOME/VEGETATION PACKAGE

In order to see the vegetation stored select the VegetationPackage/biome you want to see vegetation instances for.

SELECT VEGETATION ITEM

Select each item to see the number of stored instances.

If you have vegetation from multiple sources. baked, manually painted, imported, added with API etc you will see a count per source with an option to clear instances per source.

CLEAR INSTANCES

There are several options to clear baked or all instances from one or more vegetation packages. Select enable runtime spawn if you want to edit the spawning rules again.

BAKE VEGETATION

In order to bake the results of the run-time spawning rules to the storage package select the vegetation item you want to bake and press the "Bake vegetation from ruleset button". This will create all instances for the terrain and store it in the package.

Use the "Bake ALL" button to bake all vegetation items to the package. This will also disable the "run-time spawn" on each vegetation item. After bake it is loaded form the storage.



Persistent Vegetation Storage AWES.	ge (Script) M.E. Persistent Vegetation	n Storage
Settings	Stored Vegetation	Bake Vegetation
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Select biome/vegetation package Selected vegetation package	Default biome	
Select Vegetation Item		
	Bake Vegetation Item from ruleset	
Bake vegetation item will calculate all instances of the vegetation item in the terrain and store this in the persistent storage. This will also disable 'Enable run-time spawn' on the vegetation item.		
	Bake ALL Vegetation Items from rulese	t
Bake ALL Vegetation Items from all VegetationPackages/Biomes		

SELECT BIOME/VEGETATION PACKAGE

Select the biome you want to bake vegetation from



EDIT VEGETATION

This allows you to manually add, remove and edit any tree, object or large object in the persistent storage.

If you edit an items position, scale or rotation the VegetationSourceID will be set to manual edit.



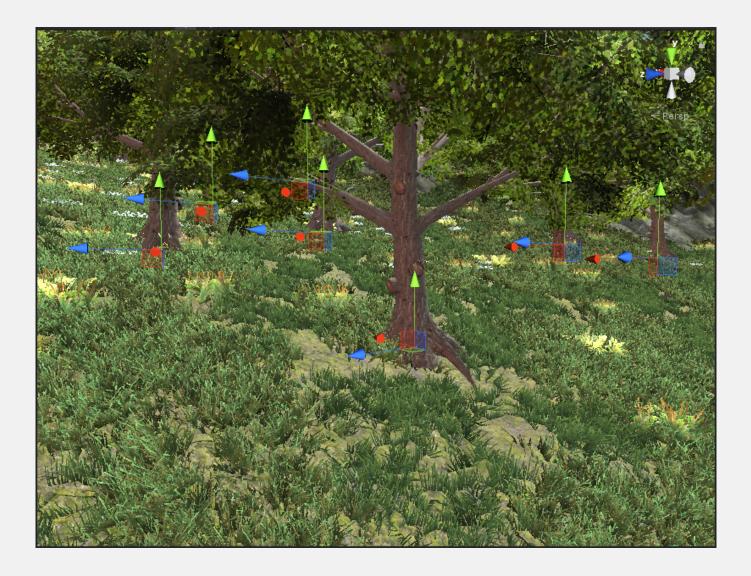
Versistent Vegetation Sto		n Storage
Settings	Stored Vegetation	Bake Vegetation
Edit Vegetation	Paint Vegetation	Precision Painting
Select biome/vegetation package Selected vegetation package	1 Default biome	
Select Vegetation Item		
Select ground layers that will be terrains.	used for selection when adding and moving mask:	s. These will be used in addition to unity
Ground Layers	Nothing	
Insert Vegetation Item: Ctrl-Click Delete Vegetation Item: Ctrl-Shift-(lick	
Select the Vegetation item to edit	t. Move/scale and rotate handles will show up in th	he sceneview.

Add new items with Ctrl-click in the terrain. Remove with Ctrl-Shift-Click



All items within range will get normal unity move, rotate and scale handles. Mode is selected with the normal unity buttons.





PAINT VEGETATION

The persistent storage has a painting tool for painting grass and plants. It works in a similar way unity terrain painting tool does but with some additional functionality.







Persistent Vegetation Storag A.W.E.S.O	e (Script) M.E. Persistent Vegetatio	n Storage
Settings	Stored Vegetation	Bake Vegetation
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Select biome/vegetation package Selected vegetation package 1	Default biome	+
Select Vegetation Item		
terrains.	d for selection when adding and moving masks	s. These will be used in addition to unity ‡
	* * ☆ · · · · · ·	🍬 🕷 😻 🌞 🎆 🤯 👘
Delete Vegetation: Ctrl-Click		
① Delete Vegetation will only remove version	egetation of the selected type.	
Settings Randomize Position Paint on colliders Use steepness/angle rules Sample distance Brush Size Vegetation items will follow the rotated	tion mode set in the VegetationPackage	1 5

PAINTING

You paint with left click in the map, remove instanced with ctrl-click.

SETTINGS

- Randomize position will add randomness to the sample positions on top of the point grid you see in the terrain
- Paint on colliders
 With this enabled you will be able to paint vegetation on any collider in the scene as well as the terrain
- Use steepness/angle rules



With this enabled each vegetation items steepness rules (set in VegetationSystem component) will be applied before painting

- Sample distance This is the density of the painting
- Brush size The size of the brush







PRECISION PAINTING

The precision painting tool is similar to the normal painting tools but works a bit differently. While the normal painting tools project a brush from above and down on the terrain and colliders the precision painting tool will use a ray from the camera perspective. The normal of the hit point will be used as up direction for the placed vegetation. This allows for fine tuning the positioning.

The precision tool will allow you to paint on any mesh, even without a collider.

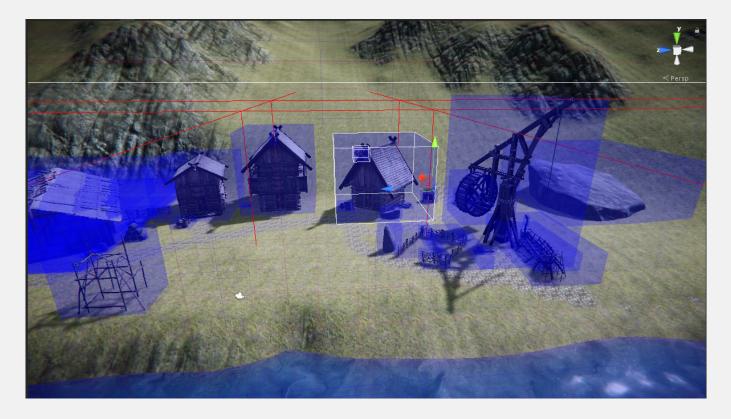






Versistent Vegetation Store	brage (Script) S.O.M.E. Persistent Vegetatio	n Storage
Settings	Stored Vegetation	Bake Vegetation
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Select biome/vegetation package Selected vegetation package	1 Default biome	
Precision Painting will allow you vegetation upside down if the ro	to fine place vegetation. Position is based on a sc tation settings is set to follow terrain.	reen ray and will even allow you to place
Select Vegetation Item		
Select ground layers that will b terrains.	e used for selection when adding and moving mask:	s. These will be used in addition to unity
Ground Layers	Nothing	
Settings Painting mode ① This will raycast any enabled m	Terrain And Meshes reshes in the scene for position.	
Use steepness/angle rules Sample distance	<u> </u>	2.28





Internally the painting tool is building up an octree of all gameobjects with meshes in the scene and manually raycasting these to find the mesh intersection.



