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Unreal Cooking Insights

An overview of profiling your package data using Unreal Cooking Insights



Unreal Cooking Insights provides you with the ability to gather and display information about the way packages are cooked in your project. Large cooking times can significantly affect the productivity of teams that are working on larger projects. By showing the times it takes to cook each package, this tool can help reduce cooking times.

Setup

You can run a trace for cooking insights from the command line by using the command:

```
1 trace=default,cook  
2
```

 Copy full snippet

Alternatively, you can run the following command to target a specific host and platform:

```
1 MyProject -run=cook -log -trace=default,cook -tracelhost=localhost -targetplatform=Windows  
2
```

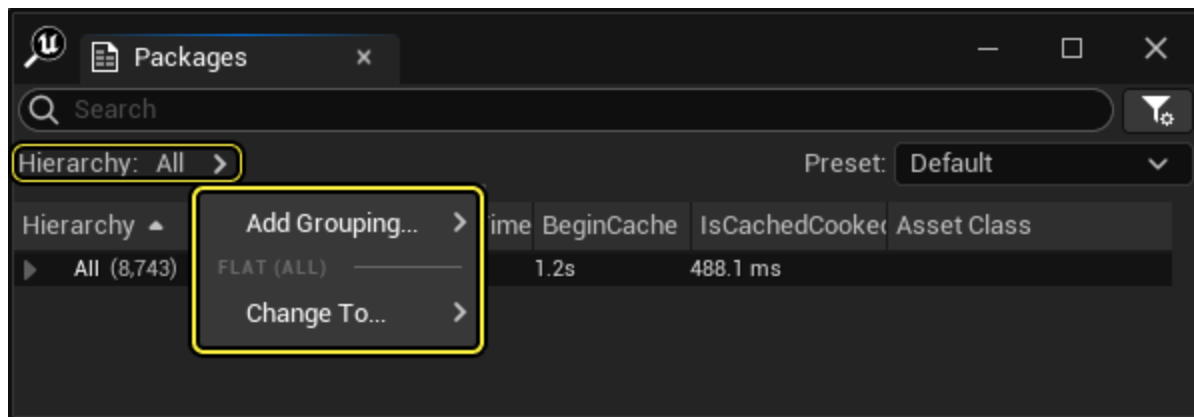
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When loading a trace that contains cook data, the **Packages** table will be populated with the **load time**, **save time**, and **cooking time** for each package when the analysis is complete.

	Id	LoadTime	SaveTime	BeginCache	IsCachedCooked	Asset Class
All (8,743)		42.5s	7.9s	1.2s	488.1 ms	
/AnimationLocomotionLibrary/AnimModifiers/SyncMarkerAnimModifier	317,614	24.5 ms	208.7 μs	14.4 μs	9.7 μs	Blueprint
/AudioModulation/BitDepth	384,082	331.4 μs	93.4 μs	200 ns	100 ns	SoundModulationParameterScaled
/AudioModulation/HPF cutoffFrequency	344,296	228.1 μs	89.8 μs	200 ns	0	SoundModulationParameterHPFFrequency
/AudioModulation/LowRateFrequency	444,991	223.5 μs	87.2 μs	0	0	SoundModulationParameterScaled
/AudioModulation/LPF cutoffFrequency	408,523	217.4 μs	92.9 μs	300 ns	0	SoundModulationParameterLPFFrequency
/AudioModulation/Pan	313,818	249.7 μs	89.8 μs	100 ns	0	SoundModulationParameterBipolar
/AudioModulation/Pitch	440,310	210.2 μs	108.3 μs	400 ns	200 ns	SoundModulationParameterBipolar
/AudioModulation/SampleRate	373,560	227.6 μs	94.8 μs	300 ns	0	SoundModulationParameterFrequency
/AudioModulation/TimeOfDay	340,167	225.1 μs	96.4 μs	200 ns	100 ns	SoundModulationParameterScaled
/AudioModulation/Volume	436,252	223.9 μs	95.9 μs	1 μs	200 ns	SoundModulationParameterVolume
/CommonUI/DefaultMediaTexture	497,991	281.2 μs	167 μs	2.1 μs	1.8 μs	MediaTexture
/CommonUI/GenericInputActionDataTable	395,088	1.6 ms	4.2 ms	600 ns	100 ns	CommonGenericInputActionDataTable
/CommonUI/VideoPlayerMaterial	405,714	740.8 μs	921.3 μs	364.9 μs	323.6 μs	Material
/ControlRig/Controls/ControlRig_Arrow2_1mm	450,303	548 μs	651.8 μs	200 ns	358.6 μs	StaticMesh
/ControlRig/Controls/ControlRig_Arrow2_3mm	381,545	561.5 μs	464 μs	100 ns	227 μs	StaticMesh
/ControlRig/Controls/ControlRig_Arrow2_solid	386,232	570.5 μs	462.7 μs	300 ns	170.2 μs	StaticMesh
/ControlRig/Controls/ControlRig_Arrow4_1mm	491,328	540 μs	462.8 μs	100 ns	340.1 μs	StaticMesh
/ControlRig/Controls/ControlRig_Arrow4_3mm	489,140	547 μs	462.4 μs	300 ns	313.2 μs	StaticMesh
/ControlRig/Controls/ControlRig_Arrow4_solid	347,409	540 μs	453.4 μs	300 ns	218.6 μs	StaticMesh
/ControlRig/Controls/ControlRig_Arrow_1mm	461,431	537.3 μs	468.8 μs	100 ns	206.1 μs	StaticMesh
/ControlRig/Controls/ControlRig_Arrow_3mm	418,146	553.7 μs	467.7 μs	200 ns	189.8 μs	StaticMesh
/ControlRig/Controls/ControlRig_Arrow_solid	313,611	545.3 μs	489.6 μs	200 ns	161 μs	StaticMesh
/ControlRig/Controls/ControlRig_Box_1mm	445,232	534.5 μs	514.2 μs	400 ns	1.9 ms	StaticMesh
/ControlRig/Controls/ControlRig_Box_3mm	350,306	555.2 μs	493.3 μs	200 ns	874.7 μs	StaticMesh
/ControlRig/Controls/ControlRig_Box_solid	337,533	537.1 μs	460.1 μs	200 ns	101.4 μs	StaticMesh
/ControlRig/Controls/ControlRig_Circle_1mm	429,814	643.4 μs	505.4 μs	500 ns	360.4 μs	StaticMesh
/ControlRig/Controls/ControlRig_Circle_3mm	435,107	627.6 μs	510.6 μs	200 ns	350.3 μs	StaticMesh

Hierarchy Sorting

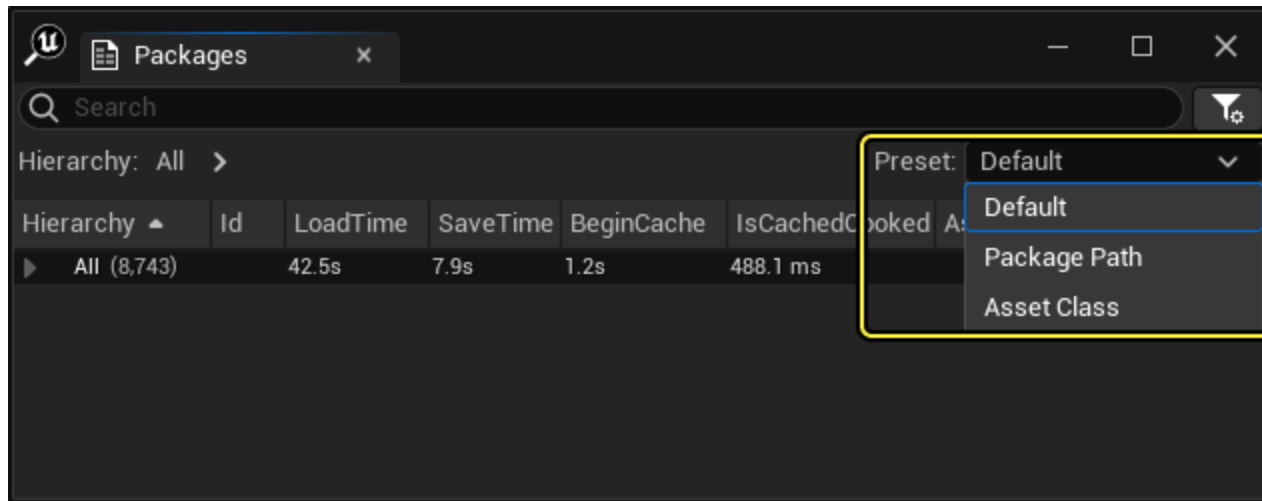
When selecting the **Hierarchy** filter, you can choose from the following Grouping options.



Hierarchy Grouping Option	Description
Flat (All)	Creates a single group that includes all items.
Unique Values - Asset Class	Creates a group for each unique value.
Path Breakdown - Package Name	Creates a tree hierarchy out of the path structure of string values.

Preset Options

When observing your package data, you can navigate to **Preset** to configure your tree view.



You can choose from the following Presets:

Preset Option	Description
Default	Shows the default packages info.
Package Path	Groups packages by the package path.
Asset Class	Groups packages by their most important Assets.

Column Sorting

Cooking Insights groups specific package data in the following columns.

Column Name	Description
Hierarchy	Hierarchy of the package's tree.
Id	The Id of the package.
LoadTime	The amount of time it took to load the package.
SaveTime	The amount of time it took to save the package.
BeginCache	The total time spent in the <code>BeginCacheForCookedPlatformData</code> function for the package.
IsCachedCooked	The total time spent in the <code>IsCachedCookedPlatformDataLoaded</code> function for the package.

Column Name	Description
Asset Class	The class of the most significant Asset in the package.

You can sort columns into the following sorting categories.

Sorting Option	Description
Sort Ascending	Sort your chosen column in ascending order.
Sort Descending	Sort your chosen column in descending order.
Sort By	Sort your column by the following values: <ul style="list-style-type: none"> • Package Hierarchy • Id • LoadTime • SaveTime • BeginCache • IsCachedCooked • AssetClass

You can also customize the table by showing and hiding columns individually by using the following options.

Column Visibility	Description
View Column	Hides or shows columns.

Column Visibility	Description
Show All Columns	Resets the tree view to show all columns.
Reset Columns to Default	Resets columns to default.