Before Adding RCC_AlCarController

First of all, be sure your vehicle is working fine before adding AI controller to it. **RCC_AICarController** must be attached to the vehicle equipped with the **RCC_CarControllerV3**. Once you add the **RCC_AICarController** to the vehicle, no need to do anything else for the vehicle. Settings for the AI will be explained below.

How the RCC_AlCarController Works

RCC_AlCarController calculates path to the target point with throttle, brake, and steer inputs. And then, feeds the **RCC_CarControllerV3** with these calculated inputs.

Creating NavMesh For Scene

Al is using **Unity's Nav Mesh** for calculating the path. Therefore, you must bake and create navigation mesh for your scene first. Al won't be able to find correct path if your scene doesn't contain a proper navigation mesh.

How to Create NavMesh

Select your all static objects (including road too). And set them "Static".

🗅 Project 🛛 🗿 Inspe	ctor 🗄 Lighting 🛛 🔀	Nav	igation 🔒 📲
😭 🗹 AITrack			Static 🗸
Tag Untagged	‡ Layer		Nothing
Model Select	Revert	\checkmark	Everything
🔻 🙏 🛛 Transform		\checkmark	Lightmap Static
Position	X 31	\checkmark	Occluder Static
Scale	X U X 1	\checkmark	Batching Static
		\checkmark	Navigation Static
	Add Componen	\checkmark	Occludee Static
		\checkmark	Off Mesh Link Generation
		\checkmark	Reflection Probe Static
	L	_	

When all your static objects are marked as "**Static**", then you can bake your navigation mesh. Open the "Navigation" window from the Window \rightarrow Navigation.

Window Help		
Next Wind	ow	Ctrl+Tab
Previous W	/indow	Ctrl+Shift+Tab
Layouts		+
Scene		Ctrl+1
Game		Ctrl+2
Inspector		Ctrl+3
Hierarchy		Ctrl+4
Project		Ctrl+5
Animation		Ctrl+6
Profiler		Ctrl+7
Audio Mix	er	Ctrl+8
Asset Store	2	Ctrl+9
Version Co	ntrol	
Animator	Parameter	
Animator		
Sprite Pack	œr	
Lighting		
Occlusion	Culling	
Frame Deb	ugger	
Navigation	n	
Console		Ctrl+Shift+C

Default settings should be like this;

🛱 Project	Inspector	표는 Lighting	🔀 Naviga	tion 📲	
Obj	ect	Bake		Areas	
Baked Agent S	Size			/	
1.	5	R=	H = 2	45°	
Agent Radius	4				
Agent Height	2				
Max Slope					
Step Height	1.5				
Step Height conflicts with Max Slope. This makes some slopes unwalkable. Consider decreasing Max Slope to < 36.9 degrees. Or, increase Step Height to > 2.00.					
Generated Off Mesh Links					
Drop Height	0				
Jump Distance	0				
▶ Advanced					

And then, click the bake button and bake your scene. Check your blue navigation mesh. Al will use this mesh for pathfinding. Should be like this;



Adding Al Controller To Vehicle

First, build and configurate your vehicle. Be sure it's working properly. When everything works fine and results are as expected, you can add RCC_AlController to your vehicle by "Tools \rightarrow BoneCracker Games \rightarrow RCC \rightarrow Al Controller \rightarrow Add Al Controller To Vehicle".

Tools UFPS NGUI Mobile Input Window Help				
BoneCracker Games	Edit Asset Settings			
⊒ -= #Scene € Game	Add Main Controller To Vehicle			
16:10 Landscape (16:10) -	Configure Ground Materials		Maximize on Play	
	AI Controller	•	Add AI Controller To Vehicle	
	Misc	+	Add Waypoints Container To Scene	
			Add BrakeZones Container To Scene	

This will add "RCC_AlController" to the root of your vehicle;

🔻 健 🗹 RCCAI Car Controller (S	cript)	🔯 🌣,
RCC	AI Controller	
Obstacle Layers	Everything	\$
Wide Ray Distance	20	
Tight Ray Distance	20	
Side Ray Distance	3	
Limit Speed		
Smooth Steering		
Next Waypoint Pass Radius	40	
Current Waypoint:	0	
Laps:	0	
Total Waypoints Passed:	0	
Ignoring Waypoint Due To Unexp	o∈False	
	Add Component	

Vehicle will use "Nav Mesh Agent" for road path based on your waypoints, and will use raycasts for dynamic objects. If you have specified gameobjects to ignore raycasts, you can select specific layers from the obstale layers.

Adding Waypoints Container To Scene

Tools UFPS NGUI Mobile Input Window Help				
BoneCracker Games	Edit Asset Settings			
🔒 ₊≡	Add Main Controller To Vehicle	- 8		
16:10 Landscape (16:10) *	Configure Ground Materials		Maximize on Play	
	AI Controller		Add AI Controller To Vehicle	
	Misc	•	Add Waypoints Container To Scene	
			Add BrakeZones Container To Scene	

Waypoints are used for path. You can create your own path for the AI with these waypoints. All waypoints are collected by the container. You need to create Waypoints Container in your scene to create waypoints. You can create it from the Tools \rightarrow BCG \rightarrow RCC \rightarrow AI Controller \rightarrow Add Waypoints Container To Scene. This will add "RCC AI Waypoints Container" to your scene. Select the waypoint container in your scene. Simply hold Shift and left click on your road to create a new waypoints. Create your path with them;

🛛 📴 RCCAI Waypoints Container (Script)		💽 🌣,
	Delete Waypoints	
▼ Waypoints		
Size	24	
Element 0	🙏 0 (Transform)	0
Element 1	↓1 (Transform)	0
Element 2	↓2 (Transform)	0
Element 3	🙏 3 (Transform)	0
Element 4	🙏 4 (Transform)	0
Element 5	↓5 (Transform)	0
Element 6	🙏 6 (Transform)	0
Element 7	🙏 7 (Transform)	0
Element 8	🙏 8 (Transform)	0
Element 9	🙏 9 (Transform)	0
Element 10	🙏 10 (Transform)	0
Element 11	🙏 11 (Transform)	0
Element 12	↓12 (Transform)	0
Element 13	🙏 13 (Transform)	0
Element 14	🙏 14 (Transform)	0
Element 15	🙏 15 (Transform)	0
Element 16	🙏 16 (Transform)	0
Element 17	🙏 17 (Transform)	0
Element 18	🙏 18 (Transform)	0
Element 19	🙏 19 (Transform)	0
Element 20	🙏 20 (Transform)	0
Element 21	🙏 21 (Transform)	0
Element 22	🙏 22 (Transform)	0
Element 23	🙏 23 (Transform)	0
() Create Waypoints By S	Shift + Left Mouse Button On Your Road	

<u>Note</u>: Do not use **CTRL + D** for duplicating any waypoint.

Each waypoint has a target speed. Vehicle will adapt its speed to this target speed when radius.

Note: Be sure AI vehicle is close enough to the nav mesh. If it's too far away from it, pathfinding won't work.

Mode (Follow Waypoints)

Follows all waypoints in the selected container. If your scene has multiple waypoint containers, you can select specific one for the vehicle. Once the vehicle completes the lap, it will stop if option is enabled. Otherwise, it will follow the waypoints again.

Mode (Follow Target)

Follows target gameobject without crashing to it. It will stop or start to follow at certain distances. Distances can be adjusted directly from the inspector panel.

Mode (Chase Target)

Chases target gameobject. Crashes to it and it won't stop at certain distance.