

# Map System

## Patch notes

Version 1.2.1 (1/18/2024):

- Resolved a bug that caused crashes in C++ projects and incorrect asset loading. Changed the loading phase of the plugin to “PreDefault”.
- Added the ability to disable or enable the sorting of markers by distance in MapHelper (bSortMarkers).
- Introduced the ability to use custom minimap rotation, independent of the controller's rotation, in MapHelper (bUseControllerRotation and PlayerYawRotation).
- Implemented new functions in WBP\_Map for controlling map position, zoom of the big map, and setting custom markers. These functions, namely MoveMap, ZoomMap, and CreateCustomMarker, are now accessible in Blueprints. They can be used for enhanced control of the big map via keys (There's an example provided in the sample project).
- Changed the type of texture used in MapConfig from UTexture2D to UTexture. This change allows the use of Render Target Textures as an image for the map and minimap (MapHelper->MapHelperConfig->MapTexture).
- Added the ability to disable or enable the display of distance units in WBP\_ScreenMarker (bShowMeters).

Version 1.2 (10/20/2023):

- Added the ability to recreate marker widgets in the MapMarkerComponent using the 'ReRegisterMarker' function.
- Enabled inheritance from the MapMarkerComponent, allowing to add custom logic
- Resolved a bug that caused custom markers to be incorrectly positioned on the map when the MapHelper was rotated.
- Added a new structure called 'MapHelperConfig' that is utilized in MapHelper. This structure includes information about the map size, map texture, and minimap zoom. You can modify the MapHelperConfig at runtime using the 'SetMapHelperConfig' function. If you wish to restore to the default Map Helper configuration, you can use the 'RestoreMapHelperConfig' function. Additionally, there are separate functions available for adjusting these values individually
- Added the capability to specify another actor as a reference point for calculating marker positions within MapHelper, using the 'SetReferenceActor' function. By default, MapHelper itself serves as the reference actor.
- Implemented support for multiple levels
- Made other minor changes and improvements.

Version 1.1 (07/11/2023):

1. Screen markers: The positions of markers in the world can be projected onto the screen. To use it, you need to add WBP\_ScreenMarkerDrawer to your HUD widget and expand the widget to full screen.
  - Added new widgets: WBP\_ScreenMarkerDrawer and WBP\_ScreenMarker.
  - Added settings to customize screen markers in MapMarkerComponent.
2. Optimizations:
  - Added the ability to find paths asynchronously. MapHelper->bFindPathAsync has been added.
  - Added sorting of markers into hidden and visible groups in MapHelper. This allows for the avoidance of creating marker widgets if the marker is far away from the player. New variables have been included to configure this feature: maximum distance and sorting rate.
3. Other:
  - Moved all settings from MapMarkerWidget to MapMarkerComponent.
  - Moved all settings from MapCustomMarker to MapHelper.
  - Added the WBP\_MapMarker\_Player widget. Add MapMarkerComponent to your pawn to display it on the map
  - Made various minor changes and improvements.

Note: You may get errors after updating, such as: "Failed to Load Outer for resources...". To fix it just go to the MapSystem Content-->UI-->Markers and move WBP\_MapMarker\_Base to the UI folder, and then restart the editor.

Version 1.0.1 (03/12/2023):

- Fixed a bug - In some cases, a packaged project crashed due to an invalid MPC\_Minimap. Added validation check.
- Added an ability to disable path update on every frame. It can be useful if you want to update the path manually using the FindPath() function. - MapHelper->bFindPathEveryFrame