Flex Partition Changelog

Version 1.8 (WIP)

• Core Changes:

- Replaced ActorStreamingIdentifier with FGuid for more reliable and consistent actor identification. (Renamed GetStreamingGuid accordingly.)
- Added FActorStreamingConfig to centralize and simplify streaming settings at the class level.
- Introduced bEnableSave in FlexPartitionComponent to control whether an actor participates in save operations.
- Updated FlexPartitionHandle (Support for K2 Nodes).

Save System:

- Added optional automatic level name prefix for save slots.
 (Controlled by bUseLevelPrefix in Editor Settings.)
- Exposed Save and Load functions to Blueprints through UFlexPartitionFunctionLibrary.
- Implemented auto-save support for streaming actors.

Version 1.7 (March 5, 2025)

• Restructuring & Optimization:

- Removed archetypes to allow grid modifications on level-instantiated actors.
- Eliminated registration queues for a more streamlined system.
- Replaced line trace (Check Floor) with a more efficient collision check using World Partition's streaming query.

Expanded Functionality & C++ Support:

- Introduced FlexPartitionHandle to centralize and customize actor spawning and despawning, giving developers full control over streaming behavior.
- FlexPool, an actor pooling system, is now supported through FlexPartitionHandle, improving performance by reducing redundant spawning and reusing existing actors efficiently.
- Improved modularity to facilitate custom C++ implementations.

Version 1.6 (November 3, 2024)

- **Soft Object Class Fix** Resolved dedicated server issues related to soft object references.
- **Source Streaming Enhancements** Added component to simulate streaming points, such as player positions.
- **Manual Streaming Controls** New setting to enable or disable the player's position as the streaming source.
- Improved Debugging Tools:
 - FlexPartition.DrawActorLocation now excludes obstructed visibility.
 - Added console variable to control debug bounding box thickness.
- **Initialization Optimization** System initialization now occurs before BeginPlay, improving startup reliability.

Version 1.5 (August 6, 2024)

- **Grid Restructuring** Optimized sector-based grids for 2D and 3D environments, improving search and performance.
- **Actor Identification System** Introduced a new variable for customizing actor parameters.
- **Multiplayer Optimization** Ensured consistent computational costs across multiple players.
- **Global Actor Functions** Expanded support for Spawn, Destroy, and Get Actor commands.
- Debugging Improvements:
 - Added tools for drawing inactive actors.
 - Visualized the grid's center markers.
- **Spawn Safety** Implemented Check Floor on Spawn to ensure actors are placed on valid surfaces, preventing placement issues on uneven terrain or slow streaming scenarios.

Version 1.4 (May 30, 2024)

• **3D Grid Mode** – Introduced dynamic 3D grid support with customizable settings for per-level configurations.

Version 1.3 (May 23, 2024)

- **Debugging Actor Locations** Enhanced tools for precise location tracking of actors.
- **Multiplayer Support** Optimized grid systems for multiple player controllers.

Version 1.2 (April 17, 2024)

- **2D Projection Support** Enabled grid structuring for irregular terrain.
- **Z-Axis Relevance** Added Z-axis as a factor in grid relevance calculations.
- **Spatial Grid Debugging** Improved debugging for grid visualization.

Version 1.1 (April 11, 2024)

- **Persistent Debug Grids** Always displayed independently of the main subsystem.
- **Performance Optimization** Calculations now occur only when actively debugging.
- **Streaming Filters** Added filters to prevent duplicate actor registrations in World Partition maps.
- Error Logging Improved log clarity for core functions.