

# UE4 1.16.0 Release Notes

These release notes describe changes to Oculus's Unreal Engine 4.16 available from the Oculus GitHub repository. For more information, see the Oculus [Unreal Developer Guide](#).

Oculus-1.16 adds support for mixed reality capture (Rift only), which places real-world objects in VR. It allows live video footage of a Rift user to be composited with the output from a game to create combined video that showed the player in a virtual scene. For more information, see Unreal Mixed Reality Capture.

## New Features

- Oculus-1.16 adds support for mixed reality capture (Rift only), which allows live video footage of a Rift user to be composited with the output from a game to create combined video that showed the player in a virtual scene. For more information, see Unreal Mixed Reality Capture.
- Added sample map with mixed reality capture enabled to Collaboration\Oculus\Public\MixedRealitySample.
- Refactored Blueprints for unified Oculus plugin model. See Blueprints for more information.
- Added Blueprints for simplified Loading Screen support.
- Added Android graphics debugging support to our 4.16 branch. See Testing and Performance for more information.
  - 4.16-oculus added RenderDoc graphics debugging support (Android only, experimental)
  - 4.16-oculus added Mali Graphics Debugger support (Android only, requires a Mali phone such as the Android GALAXY S6).

## API Changes

- Removed default loading screen. Use defaultengine.ini or loading screen Blueprints to add a loading screen to your application. See Loading Screens for more information.
- Added anyhand setting to motion controller component, which will attach to any Gear VR Controller, whether left-handed or right-handed.

## Known Issues

- A significant drop in frame rate occurs when UE4 is not in focus in VR preview mode. To avoid this issue, uncheck the Use Less CPU when in Background in Edit > Editor Preferences > General (left sidebar) > Miscellaneous (left sidebar) > Performance.

- Exclusive Mode issues: Setting the mirror window to full-screen exclusive mode will not work correctly if the monitor and HMD are connected to different GPUs.
- Stereo Layer Depth Ordering: Doesn't support head-locked layers, only world-locked and tracker-locked.
- Oculus UE4 1.15 and earlier: Oculus Blueprints not visible in Level Blueprint in Epic launcher and Epic source versions when Gear VR Plugin is enabled. Workaround for source version: open the file GearVR.uplugin and replace "WhitelistPlatforms" : ["Android"] with "WhitelistPlatforms" : [ "Android", "Win64", "Win32" ]. This does not affect source shipped through the Oculus Unreal GitHub repository.
- UE4 Issue - UE4 builds fail when using Android SDK tools 25 or newer. Please review the [UE Answers](#) page related to this issue for more information.