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Testing and Optimizing Your Content

How to make sure your content does what you expect it to, at the quality and frame rates that you need.



Unreal Engine includes tools and features that help developers test and optimize content for applications that need to run at framerates for high-quality experiences.

To learn more, read about the following topics.

Topics



Gameplay Debugger

Tool that enables analyzing realtime gameplay data at runtime.



Using Oodle

An introduction to using Oodle compression solutions in Unreal Engine.



Console Variables Editor

View and modify all console variables used in your project using the Console Variables Editor, and share console variable settings in a preset across projects.



Crash Reporting

Learn about crash reports and how to use the Crash Reporter in your projects.



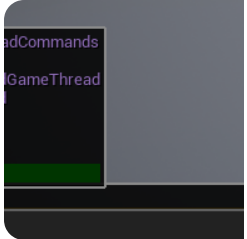
PSO Caches

Record the GPU states for your application in advance to optimize rendering.



Significance Manager

Adjust performance in project-specific ways with the Significance Manager



Stat Commands

Console commands specific to displaying game statistics



Unreal Insights

Profile your project's performance with Unreal Insights.



Zen Loader

An Overview of Unreal Engine 5's runtime loader.



Stats System Overview

The Stats System collects and displays performance data to help optimize Unreal Engine projects



Low-Level Tests

Framework for lightweight, module-centric tests.



Visual Logger

Tool that captures state from actors and then displays it visually in game or editor.



Clang Sanitizers

Instrument Clang sanitizers in your builds for Android and Linux to quickly diagnose problems.



Automation Test Framework

Overview of the automation system used for unit testing, feature testing, and content stress testing.