

Microsoft Engineering Investigation Dossier

Draft Version 1.0

Project: Eldra Survival

Subject: Investigation of Unreal Engine 5.8 runtime DLL loading under Windows Smart App Control / Code Integrity.

Executive Summary

The project compiles successfully using Unreal Build Tool and Visual Studio 2022. The Unreal Editor later fails while loading locally compiled runtime plugin DLLs. The project architecture, build system, binary structure and development environment were audited before requesting Microsoft engineering assistance.

Verified Findings

- Successful compilation with zero compiler/linker errors.
- Runtime DLLs are valid PE64 binaries.
- Plugin architecture, Build.cs, Target.cs and module registration were audited.
- Windows Code Integrity events reference the VerifiedAndReputableDesktop policy.
- Official Epic DLLs are Authenticode signed; locally generated DLLs are unsigned.

Engineering Questions

1. Is this expected Smart App Control behavior?
2. Which internal Code Integrity decision rejects the DLL?
3. What Microsoft-supported workflow is recommended for Unreal Engine native development while Smart App Control is enabled?
4. Are additional diagnostics available to expose the exact rejection reason?

Note

This PDF is an executive draft. The complete dossier is intended to include the full multi-volume investigation, evidence index, appendices, logs, screenshots and references.