

ABSTRAK

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ANALISIS KINERJA GAME ELDEN RING DENGAN DAN TANPA *KERNEL-LEVEL ANTI CHEAT*

(xiv + 62 halaman: 14 gambar; 3 tabel; 2 lampiran)

Kernel-level anti-cheat adalah sistem keamanan *game* yang berjalan di tingkat *kernel* untuk mendeteksi kecurangan. Meskipun efektif, teknologi ini memicu kekhawatiran akan dampaknya terhadap performa sistem, terutama pada saat *game* dijalankan secara *offline*. Penelitian ini mengukur pengaruh *kernel-level anti-cheat* dalam *game* Elden Ring melalui metode *profiling* dan dianalisis melalui *comparative data analysis*. Pengujian dilakukan dalam dua skenario dalam waktu 10 menit sebanyak 5 kali, *kernel-level anti-cheat* aktif dan nonaktif. Hasil yang diketahui menunjukkan peningkatan pada penggunaan CPU, RAM, dan kernel time saat *anti-cheat* aktif, sementara GPU dan aktivitas disk tidak terpengaruh. Disimpulkan bahwa sistem ini membebani performa sistem secara nyata.

Referensi: 12 (2020-2025)

Kata Kunci: *Cheat, Kernel-level anti-cheat, Video game, Profiling, Kernel-time, Easy anti-cheat.*

ABSTRACT

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(xiv + 62 pages: 14 images; 3 tables; 2 attachments)

Kernel-level anti-cheat is a game security system that runs at the kernel level to detect cheats. While effective, this technology raises concerns about its impact on system performance, especially when played offline. This study measures the impact of kernel-level anti-cheat in Elden Ring using profiling and comparative data analysis. Tests was conducted in two scenarios 5 times for 10 minutes each, with the anti-cheat active and inactive. Results show an increase in CPU, RAM, and kernel time usage when the anti-cheat is active, while GPU usage and disk activity remain unaffected. It is concluded that this security system imposes a noticeable burden on performance.

Reference: 12 (2020-2025)

Keywords: Cheat, Kernel-level anti-cheat, Video game, Profiling, Kernel-time, Easy anti-cheat.