

Container Security

Bachelor's degree graduation project

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Outline

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 - Linux Kernel by Fuzzing
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Outcome

AAA

Current outcome

- A fully bugged container.

FIXME

AAA

Paper review

Have been read papers

- Linux Kernel OS Local Root Exploit[1]
- PINE: Optimizing Performance Isolation in Container Environments[2]
- Study of Security Flaws in the Linux Kernel by Fuzzing[3]

To do things

Build a simple container

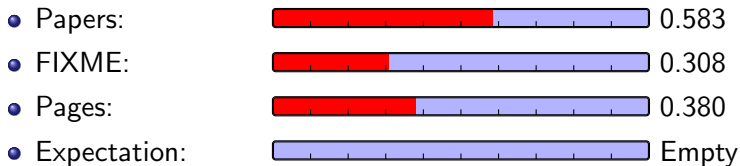
Linux Kernel OS Local Root Exploit

Optimizing Performance Isolation

Fuzzing

Current progress

Application of MOST



Reference

References I

-  Babak D. Beheshti A.P. Saleel Mohamed Nazeer. “Linux kernel OS local root exploit”. In: 2017. URL: <https://ieeexplore.ieee.org/document/8001953>.
-  Congfeng Jiang Youhuizi Li Jiancheng Zhang. “PINE: Optimizing Performance Isolation in Container Environments”. In: *IEEE Access* 7.18526707 (2019).
-  E.V. Sharlaev P.A. Teplyuk A.G. Yakunin. “Study of Security Flaws in the Linux Kernel by Fuzzing”. In: 2020. URL: <https://ieeexplore.ieee.org/document/9271516>.