Linux Plumbers Conference 2025



Contribution ID: 348 Type: not specified

Ferrochrome: A Linux VM on Android host via Android Virtualization Framework (AVF)

Running a full-featured Linux VM on Android has been a long-standing desire for developers and power users. This presentation details Ferrochrome, a project that leverages the Android Virtualization Framework (AVF) to run a guest Debian OS with deep integration into the host Android environment.

We will discuss recent advancements, including the implementation of hardware-accelerated graphics based on gfxstream which support Android host now for Ferrochrome. This work also covers seamless sharing of various input devices from Android to the Linux guest. Other key integration points include bidirectional storage sharing, dynamic resource management via storage and memory ballooning, and network port forwarding and tunneling.

In this session, we will explore the technical approach behind these features, present our findings, and invite feedback on the future of virtualization on Android.

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Session Classification: Android MC

Track Classification: Android MC