Identifying and Eliminating Contention from Booting Concurrent SNP VMs

Tuesday, 13 September 2022 12:30 (20 minutes)

We will present an evaluation of concurrent boot time of CVMs running under AMD’s SEV-SNP technology. Specifically we will discuss how booting SNP VMs concurrently can significantly slow down each other due to software bottlenecks in managing the RMP page state.

Then, we will discuss different mitigations that we’ve identified ranging from reducing lock contention to rate limiting Page State Change (PSC) requests from the guest. We hope to generate discussion on how to eliminate the software bottlenecks that we’ve identified to properly isolate concurrent SNP VMs so that they do not degrade each other’s performance.

I agree to abide by the anti-harassment policy

Yes

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