Agenda

- DRTM on Arm Overview
- Handoff from DRTM launch to Linux
- UEFI Runtime Services
- Interface from kernel TPM driver to TPM
DRTM (Dynamic Root of Trust for Measurement)
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Security guarantee
- Trustworthy measurement of target image
- Target image begins in a safe state
  - Single thread of execution
  - Interrupts disabled
  - DMA protections in place
  - Trustworthy memory map and security ACPI tables available
Scope of DRTM on Arm

- The scope of the restarted DRTM chain-of-trust is the non-secure side of the machine.
DRTM on Arm (firmware based)
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Handoff to DLME

For security critical data, DRTM provides validated tables to allow the DLME to defend itself.

What data does Linux/TrenchBoot need?

Anything missing?
UEFI RT Services

“EFI runtime services are driving a hole as big as barn through DRTM.”

This is an issue that is not architecture specific.

Does ACPI PRM (Platform Runtime Mechanism) help?
Interface from kernel TPM driver to TPM

- Command Respons Buffer is in normal memory. Definition in TCG Mobile CRB spec. Needs to be extended to encompass localities.
- Allocation of CRB buffer-- Is there an issue with the kernel driver allocating the buffer and registering with TPM service?