Linux Security BoF

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Introduction

• Who am I?
  – Linux kernel security subsystem maintainer
  – Linux kernel engineer at Microsoft

• Previously
  – Netfilter core team member
  – Author of Linux kernel crypto API
  – LSM development team
  – SELinux kernel lead at RH
  – Linux kernel team lead at Oracle
Linux Kernel Security Subsystem

• Core security features, generally under security/
  - LSM framework: extends core Unix security model
    - Most LSMs (Smack, Capabilities etc.)
    - Apparmor and SELinux LSMs now submit directly to Linus
  • Integrity
    - IMA
    - EVM
  • Keys
  - Also (elsewhere in kernel):
    • TPM, seccomp

• Provide review and assistance in getting new security mechanisms merged and maintained, i.e. a service provided by kernel security developers.

• Not part of security subsystem: crypto, audit, netfilter, disk encryption, block encryption, hardening etc.
Linux Kernel Security Resources

- Linux Security Modules (LSM) mailing list

- Other lists:
  - linux-integrity
  - keyrings
  - oss-security
  - kernel-hardening (KSPP)

- LWN security
  - https://lwn.net/Security/
Linux Security Summit (LSS)

• 2017:
  - Held with OSS USA and LPC in Los Angeles, USA in September.

• 2018:
  - LSS North America: August in Vancouver, Canada.
  - LSS Europe: October in Edinburgh, UK.

• Twitter: @LinuxSecSummit
BoF Format

• Open session!
  - Present your projects
  - Raise topics
  - Ask questions (and answer them!)