Embedded Linux Conference
2009
Security BoF

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Discussion Topics

• Device types and use cases
• Threats
• Technology
• Challenges
Device types and Use Cases

• 3rd party apps on consumer devices
  – Digital TV
  – DVR
  – MID

• Internet connected devices
  – Wireless access points
  – MID, Internet Tablet

• Streaming Content players
  – Vudu

• Cellular infrastructure
  – Encrypted transmission of data/voice
Threats

- Expose personal information (credit card, passwds, etc)
- Decrypt unauthorized channels/streams
- Content control
- Destructive behavior (erase, brick, etc)
- Communication privacy
- Device access (DoS attacks and others)
Technology

• Access Control (internal device resources)
  – SMACK, LSM, SELinux

• Encryption
  – OpenSSL

• Authorization (Keys, Certificates)
  – Gpg, OpenSSL, Certificates

• Hardware
  – Lock software to hardware
Challenges

• Missing pieces?
• Technology integration
• Complex problem set
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