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

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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