Smart TV Hacking

Nikos Sidiropoulos  Periklis Stefopoulos
Why Smart TVs are so attractive?

• More than a TV
• Popularity
• Transparency

Not fully researched in security

• Hackers Paradise
Research Question

“What kind of security countermeasures are implemented in the Samsung Smart TV's?”
Vulnerability Agenda

- Firmware
- Browser
- Samsung Apps
- Remote Help Service
- All Share
- Remote Control
- Default/Popular Apps
- Ports Scan / Pen Testing
Bad SSL implementation - MiTM
Firmware

- Firmware Online Update - Misuse
Conclusion

Firmware
• AES+XOR Encrypted
• Unsecure Online Update

Browser
• Supports SSL (wrong implementation)

Apps
• Checked By Samsung
• SSL/TLS to Install/Upgrade
Questions

Comments on code sometimes can be funny!