

Smart TV Hacking

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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?”

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A Samsung Smart TV with a silver stand. The TV is black and has a silver stand with four legs. The Samsung logo is visible on the bottom bezel of the TV.

Vulnerability Agenda

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



Browser

[Bad SSL implementation - MiTM](#)

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Firmware

- [Firmware Online Update - Misuse](#)

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Conclusion

Firmware

- AES+XOR Encrypted
- Unsecure Online Update

Browser

- Supports SSL (wrong implementation)

Apps

- Checked By Samsung
- SSL/TLS to Install/Upgrade



Questions

```
# Security hardening
#

# Give another name to the server, we dont want hackers to know
which server we use
server.tag="Swift1.0"
```

100%

map_smarttv-1.pdf - Adobe Reader

Edit View Window Help



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Tools

```
PORT      STATE SERVICE      VERSION
80/tcp    open  http         lighttpd
|_http-methods: OPTIONS GET HEAD POST
|_http-title: 404 - Not Found
443/tcp   open  ssl/http     lighttpd
|_http-title: 404 - Not Found
```

Comments on code sometimes can be funny!

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