

# 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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# Vulnerability Agenda

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

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# 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

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# Questions

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

The screenshot shows a terminal window with the following content:

```
Z:0...
map_smarttv-1.pdf - Adobe Reader
Edit View Window Help
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!