Tenda Firmware Analysis

1. AP5 Firmware V1.0.0.2

Download Link:

https://down.tendacn.com/uploadfile/AP5/US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip

firmware_analyzer.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./firmware_analyzer.py ../../../Project/tenda-firmwares/US_AP5V2.0QCA_V1.0.0.2\(4294\)_CN\&EN_TDC01.zip
+-------------------------------+------------+
| Parameter                     | Value      |
+===============================+============+
| CPIO Root Folder Addresses    | NA         |
+-------------------------------+------------+
| SquashFS Root Folder Addresses | NA        |
+-------------------------------+------------+
| Firmware Endianness           | Big Endian |
+-------------------------------+------------+
| Entropy                       | NA         |
+-------------------------------+------------+
| First 4 bytes (xxd)           |            |
+-------------------------------+------------+
| Firmware Architecture         | Unknown    |
+-------------------------------+------------+
| Architecture Variant          | N/A       |
+-------------------------------+------------+
```

CVE-2022-1262P1.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P1.py ../../../Project/tenda-firmwares/US_AP5V2.0QCA_V1.0.0.2\(4294\)_CN\&EN_TDC01.zip
+------------------------------------------------------+-----------+
| Vulnerability Type                                   | Status    |
```

```
+=======================================================+===========+
| Command Injection via pipes, semicolons, or parentheses | Not found |
+-------------------------------------------------------+-----------+
| Command Injection via backticks                        | Not found |
+-------------------------------------------------------+-----------+
| Command Injection via variable assignment              | Not found |
+-------------------------------------------------------+-----------+
```

CVE-2022-1262P2.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P2.py ./_US_AP5V2.0QCA_V1.0.0.2\(4294\)_CN\&EN_TDC01.zip.extracted
No protest binary files found in the folder.
```

Log4jVulnerabilityDetection.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./Log4jVulnerabilityDetection.py ./_US_AP5V2.0QCA_V1.0.0.2\(4294\)_CN\&EN_TDC01.zip.extracted
Scanned Files:
./_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip.extracted/0.zip
./_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip.extracted/AP5v2.0 Firmware Upgrade Guide.docx
./_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip.extracted/US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.bin
./_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip.extracted/_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.bin.extracted/88
./_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip.extracted/_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.bin.extracted/88.7z
./_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip.extracted/_AP5v2.0 Firmware Upgrade Guide.docx.extracted/[Content_Types].xml
./_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip.extracted/_AP5v2.0 Firmware Upgrade Guide.docx.extracted/0.zip
./_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip.extracted/_AP5v2.0 Firmware Upgrade Guide.docx.extracted/docProps/core.xml
./_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip.extracted/_AP5v2.0 Firmware Upgrade Guide.docx.extracted/docProps/app.xml
./_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip.extracted/_AP5v2.0 Firmware Upgrade Guide.docx.extracted/word/settings.xml
./_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip.extracted/_AP5v2.0 Firmware Upgrade Guide.docx.extracted/word/webSettings.xml
./_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip.extracted/_AP5v2.0 Firmware Upgrade Guide.docx.extracted/word/fontTable.xml
./_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip.extracted/_AP5v2.0 Firmware Upgrade Guide.docx.extracted/word/numbering.xml
./_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip.extracted/_AP5v2.0 Firmware Upgrade Guide.docx.extracted/word/document.xml
./_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip.extracted/_AP5v2.0 Firmware Upgrade Guide.docx.extracted/word/styles.xml
./_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip.extracted/_AP5v2.0 Firmware Upgrade Guide.docx.extracted/word/theme/theme1.xml
./_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip.extracted/_AP5v2.0 Firmware Upgrade Guide.docx.extracted/word/media/image1.png
./_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip.extracted/_AP5v2.0 Firmware Upgrade Guide.docx.extracted/word/media/_image1.png.extracted/4(
./_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip.extracted/_AP5v2.0 Firmware Upgrade Guide.docx.extracted/word/media/_image1.png.extracted/4(
./_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip.extracted/_AP5v2.0 Firmware Upgrade Guide.docx.extracted/word/_rels/document.xml.rels
./_US_AP5V2.0QCA_V1.0.0.2(4294)_CN&EN_TDC01.zip.extracted/_AP5v2.0 Firmware Upgrade Guide.docx.extracted/_rels/.rels
No potential Log4j exploits found in the folder.
```

2. AP4 Firmware V1.0.0.11

Download Link:

https://down.tendacn.com/uploadfile/far/201401/AP4/US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar

firmware_analyzer.py

```
┌──(kali㊉kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./firmware_analyzer.py ../../../Project/tenda-firmwares/US_AP4V1.0BR_V1.0.0.11\(2224\)_EN_TDE01.rar
+-----------------------------+--------+
| Parameter                   | Value  |
+=============================+========+
| CPIO Root Folder Addresses  | NA     |
+-----------------------------+--------+
| SquashFS Root Folder Addresses | NA  |
+-----------------------------+--------+
| Firmware Endianness         | Unknown |
+-----------------------------+--------+
| Entropy                     | NA     |
+-----------------------------+--------+
| First 4 bytes (xxd)         |        |
+-----------------------------+--------+
| Firmware Architecture       | Unknown |
+-----------------------------+--------+
| Architecture Variant        | N/A    |
+-----------------------------+--------+
```

CVE-2022-1262P1.py

```
┌──(kali㊉kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P1.py ../../../Project/tenda-firmwares/US_AP4V1.0BR_V1.0.0.11\(2224\)_EN_TDE01.rar
+--------------------------------------------------------+-----------+
| Vulnerability Type                                     | Status    |
+========================================================+===========+
| Command Injection via pipes, semicolons, or parentheses | Not found |
+--------------------------------------------------------+-----------+
| Command Injection via backticks                        | Not found |
+--------------------------------------------------------+-----------+
| Command Injection via variable assignment              | Not found |
+--------------------------------------------------------+-----------+
```

CVE-2022-1262P2.py

```
┌──(kali㊉kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P2.py ./_US_AP4V1.0BR_V1.0.0.11\(2224\)_EN_TDE01.rar.extracted
No protest binary files found in the folder.
```

Log4jVulnerabilityDetection.py

```
┌──(kali㊉kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./Log4jVulnerabilityDetection.py ./_US_AP4V1.0BR_V1.0.0.11\(2224\)_EN_TDE01.rar.extracted
Scanned Files:
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/0.rar
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/piggy
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/179344.squashfs
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/init
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/etc
```

```
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/webroot_ro/wrl_ad
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/webroot_ro/net_ba
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/lib/libupnp.so
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/lib/libresolv.so.
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/lib/libz.so
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/lib/libpthread.so
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/lib/libvos_util.s
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/lib/libdl.so.0
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/lib/libm.so.0
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/lib/pppol2tp.so
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/lib/libnvram.so
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/lib/libcrypt.so.0
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/lib/libgcc_s.so.1
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/lib/modules/fastn
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/lib/modules/2.6.2
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/lib/modules/2.6.2
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/lib/modules/2.6.2
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/lib/modules/2.6.2
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/lib/modules/2.6.2
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/lib/modules/2.6.2
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/lib/modules/2.6.2
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/lib/modules/2.6.2
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/etc_ro/shadow_pri
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/etc_ro/shadow
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/sbin/logread
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/sbin/insmod
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/sbin/mdev
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/sbin/modprobe
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/squashfs-root/sbin/lsmod
./_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.rar.extracted/_US_AP4V1.0BR_V1.0.0.11(2224)_EN_TDE01.bin.extracted/_piggy.extracted/38F000.cpio
No potential Log4j exploits found in the folder.
```

3. i9V2.0 Firmware V1.0.0.6

Download Link:

https://down.tendacn.com/uploadfile/i9/i9v2.0_V1.0.0.6(1020)_EN.zip

firmware_analyzer.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./firmware_analyzer.py ../../../Project/tenda-firmwares/i9v2.0_V1.0.0.6\(1020\)_EN.zip
+------------------------------+---------+
| Parameter                    | Value   |
```

```
+=============================+=========+
| CPIO Root Folder Addresses   | NA      |
+-----------------------------+---------+
| SquashFS Root Folder Addresses | NA    |
+-----------------------------+---------+
| Firmware Endianness          | Unknown |
+-----------------------------+---------+
| Entropy                      | NA      |
+-----------------------------+---------+
| First 4 bytes (xxd)          |         |
+-----------------------------+---------+
| Firmware Architecture        | Unknown |
+-----------------------------+---------+
| Architecture Variant         | N/A     |
+-----------------------------+---------+
```

CVE-2022-1262P1.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P1.py ../../../Project/tenda-firmwares/i9v2.0_V1.0.0.6\(1020\)_EN.zip
+-------------------------------------------------------+-----------+
| Vulnerability Type                                    | Status    |
+=======================================================+===========+
| Command Injection via pipes, semicolons, or parentheses | Not found |
+-------------------------------------------------------+-----------+
| Command Injection via backticks                       | Not found |
+-------------------------------------------------------+-----------+
| Command Injection via variable assignment             | Not found |
+-------------------------------------------------------+-----------+
```

CVE-2022-1262P2.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P2.py ./_i9v2.0_V1.0.0.6\(1020\)_EN.zip.extracted
No protest binary files found in the folder.
```

Log4jVulnerabilityDetection.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./Log4jVulnerabilityDetection.py ./_i9v2.0_V1.0.0.6\(1020\)_EN.zip.extracted
Scanned Files:
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/0.zip
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/i9v2.0 Firmware Upgrage Note.docx
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/2858.7z
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/2858
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/FB862.squashfs
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/init
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/etc
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
```

```
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root-0/sb
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root-0/sb
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root-0/sb
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root-0/sb
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root-0/sb
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root-0/sb
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root-0/sb
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root-0/sb
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root-0/sb
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root-0/sb
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root-0/sb
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root-0/sb
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_US_i9V2.0RE_V1.0.0.6(1020)_CN&EN_TDC01.bin.extracted/squashfs-root-0/sb
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_i9v2.0 Firmware Upgrage Note.docx.extracted/[Content_Types].xml
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_i9v2.0 Firmware Upgrage Note.docx.extracted/0.zip
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_i9v2.0 Firmware Upgrage Note.docx.extracted/docProps/core.xml
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_i9v2.0 Firmware Upgrage Note.docx.extracted/docProps/app.xml
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_i9v2.0 Firmware Upgrage Note.docx.extracted/word/settings.xml
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_i9v2.0 Firmware Upgrage Note.docx.extracted/word/stylesWithEffects.xml
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_i9v2.0 Firmware Upgrage Note.docx.extracted/word/webSettings.xml
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_i9v2.0 Firmware Upgrage Note.docx.extracted/word/fontTable.xml
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_i9v2.0 Firmware Upgrage Note.docx.extracted/word/numbering.xml
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_i9v2.0 Firmware Upgrage Note.docx.extracted/word/document.xml
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_i9v2.0 Firmware Upgrage Note.docx.extracted/word/styles.xml
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_i9v2.0 Firmware Upgrage Note.docx.extracted/word/theme/theme1.xml
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_i9v2.0 Firmware Upgrage Note.docx.extracted/word/_rels/document.xml.rel
./_i9v2.0_V1.0.0.6(1020)_EN.zip.extracted/i9v2.0_V1.0.0.6(1020)_EN/_i9v2.0 Firmware Upgrage Note.docx.extracted/_rels/.rels
No potential Log4j exploits found in the folder.
```

4. i29v1.0 Firmware V1.0.0.5

Download Link:

firmware_analyzer.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./firmware_analyzer.py ../../../Project/tenda-firmwares/i29V1.0\ Firmware\ V1.0.0.5.zip
+-------------------------------+-----------+
| Parameter                     | Value     |
+===============================+===========+
| CPIO Root Folder Addresses    | NA        |
+-------------------------------+-----------+
| SquashFS Root Folder Addresses| NA        |
+-------------------------------+-----------+
| Firmware Endianness           | Big Endian |
+-------------------------------+-----------+
| Entropy                       | NA        |
+-------------------------------+-----------+
| First 4 bytes (xxd)           |           |
+-------------------------------+-----------+
| Firmware Architecture         | Unknown   |
+-------------------------------+-----------+
| Architecture Variant          | N/A      |
+-------------------------------+-----------+
```

CVE-2022-1262P1.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P1.py ../../../Project/tenda-firmwares/i29V1.0\ Firmware\ V1.0.0.5.zip
+---------------------------------------------------------+-----------+
| Vulnerability Type                                      | Status    |
+=========================================================+===========+
| Command Injection via pipes, semicolons, or parentheses | Not found |
+---------------------------------------------------------+-----------+
| Command Injection via backticks                         | Not found |
+---------------------------------------------------------+-----------+
| Command Injection via variable assignment               | Not found |
+---------------------------------------------------------+-----------+
```

CVE-2022-1262P2.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P2.py ./_i29V1.0\ Firmware\ V1.0.0.5.zip.extracted
No protest binary files found in the folder.
```

Log4jVulnerabilityDetection.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./Log4jVulnerabilityDetection.py ./_i29V1.0\ Firmware\ V1.0.0.5.zip.extracted
Scanned Files:
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/0.zip
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/332B.zip
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/i29V1.0 Firmware Upgrage Note.docx
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_i29V1.0 Firmware Upgrage Note.docx.extracted/[Content_Types].xml
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_i29V1.0 Firmware Upgrage Note.docx.extracted/0.zip
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_i29V1.0 Firmware Upgrage Note.docx.extracted/docProps/core.xml
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_i29V1.0 Firmware Upgrage Note.docx.extracted/docProps/custom.xml
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_i29V1.0 Firmware Upgrage Note.docx.extracted/docProps/app.xml
```

```
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_i29V1.0 Firmware Upgrage Note.docx.extracted/word/settings.xml
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_i29V1.0 Firmware Upgrage Note.docx.extracted/word/fontTable.xml
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_i29V1.0 Firmware Upgrage Note.docx.extracted/word/numbering.xml
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_i29V1.0 Firmware Upgrage Note.docx.extracted/word/document.xml
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_i29V1.0 Firmware Upgrage Note.docx.extracted/word/styles.xml
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_i29V1.0 Firmware Upgrage Note.docx.extracted/word/theme/theme1.xml
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin.extracted/squashfs-root-0/sbin/validate_data
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin.extracted/squashfs-root-0/sbin/mount_root
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin.extracted/squashfs-root-0/sbin/firstboot
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin.extracted/squashfs-root-0/sbin/procd
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin.extracted/squashfs-root-0/sbin/modinfo
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin.extracted/squashfs-root-0/sbin/secure_upgrade.sh
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin.extracted/squashfs-root-0/sbin/udhcpc
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin.extracted/squashfs-root-0/sbin/reboot
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin.extracted/squashfs-root-0/sbin/dsl_notify.sh
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin.extracted/squashfs-root-0/sbin/logread
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin.extracted/squashfs-root-0/sbin/insmod
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin.extracted/squashfs-root-0/sbin/kmodloader
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin.extracted/squashfs-root-0/sbin/udevtrigger
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin.extracted/squashfs-root-0/sbin/ubusd
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin.extracted/squashfs-root-0/sbin/logd
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin.extracted/squashfs-root-0/sbin/wps_pbc_led.sh
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin.extracted/squashfs-root-0/sbin/devstatus
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin.extracted/squashfs-root-0/sbin/modprobe
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin.extracted/squashfs-root-0/sbin/lsmod
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin.extracted/squashfs-root-0/sbin/ifdown
./_i29V1.0 Firmware V1.0.0.5.zip.extracted/_US_i29V1.0in_V1.0.0.5(1852)_CN&EN_TDE01.bin.extracted/squashfs-root-0/sbin/wavFactoryReset
No potential Log4j exploits found in the folder.
```

5. i27v1.1 Firmware V1.0.0.3

Download Link:

https://down.tendacn.com/uploadfile/i27/i27V1.1%20Firmware%20V1.0.0.3.zip

firmware_analyzer.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./firmware_analyzer.py ../../../Project/tenda-firmwares/i27V1.1\ Firmware\ V1.0.0.3.zip
+-------------------------------+---------------+
| Parameter                     | Value         |
+===============================+===============+
| CPIO Root Folder Addresses    | NA            |
+-------------------------------+---------------+
| SquashFS Root Folder Addresses | NA           |
```

```
+-----------------------------+--------------+
| Firmware Endianness         | Little Endian |
+-----------------------------+--------------+
| Entropy                     | NA           |
+-----------------------------+--------------+
| First 4 bytes (xxd)         |              |
+-----------------------------+--------------+
| Firmware Architecture       | Unknown      |
+-----------------------------+--------------+
| Architecture Variant        | N/A          |
+-----------------------------+--------------+
```

CVE-2022-1262P1.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P1.py ../../../Project/tenda-firmwares/i27V1.1\ Firmware\ V1.0.0.3.zip
+--------------------------------------------------------+-----------+
| Vulnerability Type                                     | Status    |
+========================================================+===========+
| Command Injection via pipes, semicolons, or parentheses | Not found |
+--------------------------------------------------------+-----------+
| Command Injection via backticks                        | Not found |
+--------------------------------------------------------+-----------+
| Command Injection via variable assignment              | Not found |
```

CVE-2022-1262P2.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P2.py ./_i27V1.1\ Firmware\ V1.0.0.3.zip.extracted
No protest binary files found in the folder.
```

Log4jVulnerabilityDetection.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./Log4jVulnerabilityDetection.py ./_i27V1.1\ Firmware\ V1.0.0.3.zip.extracted
Scanned Files:
./_i27V1.1 Firmware V1.0.0.3.zip.extracted/0.zip
./_i27V1.1 Firmware V1.0.0.3.zip.extracted/US_i27V1.1br_V1.0.0.3(1402)_CN&EN_TDC01(TDE01).bin
./_i27V1.1 Firmware V1.0.0.3.zip.extracted/i27V1.1 Firmware Upgrage Note.docx
./_i27V1.1 Firmware V1.0.0.3.zip.extracted/3356.zip
./_i27V1.1 Firmware V1.0.0.3.zip.extracted/_US_i27V1.1br_V1.0.0.3(1402)_CN&EN_TDC01(TDE01).bin.extracted/1FC0
./_i27V1.1 Firmware V1.0.0.3.zip.extracted/_US_i27V1.1br_V1.0.0.3(1402)_CN&EN_TDC01(TDE01).bin.extracted/1FC0.7z
./_i27V1.1 Firmware V1.0.0.3.zip.extracted/_US_i27V1.1br_V1.0.0.3(1402)_CN&EN_TDC01(TDE01).bin.extracted/_1FC0.extracted/82EDC0.cpio
./_i27V1.1 Firmware V1.0.0.3.zip.extracted/_i27V1.1 Firmware Upgrage Note.docx.extracted/[Content_Types].xml
./_i27V1.1 Firmware V1.0.0.3.zip.extracted/_i27V1.1 Firmware Upgrage Note.docx.extracted/0.zip
./_i27V1.1 Firmware V1.0.0.3.zip.extracted/_i27V1.1 Firmware Upgrage Note.docx.extracted/docProps/core.xml
./_i27V1.1 Firmware V1.0.0.3.zip.extracted/_i27V1.1 Firmware Upgrage Note.docx.extracted/docProps/custom.xml
./_i27V1.1 Firmware V1.0.0.3.zip.extracted/_i27V1.1 Firmware Upgrage Note.docx.extracted/docProps/app.xml
./_i27V1.1 Firmware V1.0.0.3.zip.extracted/_i27V1.1 Firmware Upgrage Note.docx.extracted/word/settings.xml
./_i27V1.1 Firmware V1.0.0.3.zip.extracted/_i27V1.1 Firmware Upgrage Note.docx.extracted/word/fontTable.xml
./_i27V1.1 Firmware V1.0.0.3.zip.extracted/_i27V1.1 Firmware Upgrage Note.docx.extracted/word/numbering.xml
./_i27V1.1 Firmware V1.0.0.3.zip.extracted/_i27V1.1 Firmware Upgrage Note.docx.extracted/word/document.xml
./_i27V1.1 Firmware V1.0.0.3.zip.extracted/_i27V1.1 Firmware Upgrage Note.docx.extracted/word/styles.xml
./_i27V1.1 Firmware V1.0.0.3.zip.extracted/_i27V1.1 Firmware Upgrage Note.docx.extracted/word/theme/theme1.xml
./_i27V1.1 Firmware V1.0.0.3.zip.extracted/_i27V1.1 Firmware Upgrage Note.docx.extracted/word/_rels/document.xml.rels
./_i27V1.1 Firmware V1.0.0.3.zip.extracted/_i27V1.1 Firmware Upgrage Note.docx.extracted/_rels/.rels
No potential Log4j exploits found in the folder.
```

6. i25 CE

Download Link:

https://down.tendacn.com/uploadfile/ce/i25_CE.zip

firmware_analyzer.py

```
┌──(kali�kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./firmware_analyzer.py ../../../Project/tenda-firmwares/i25_CE.zip
+-------------------------------+---------+
| Parameter                     | Value   |
+===============================+=========+
| CPIO Root Folder Addresses    | NA      |
+-------------------------------+---------+
| SquashFS Root Folder Addresses| NA      |
+-------------------------------+---------+
| Firmware Endianness           | Unknown |
+-------------------------------+---------+
| Entropy                       | NA      |
+-------------------------------+---------+
| First 4 bytes (xxd)           |         |
+-------------------------------+---------+
| Firmware Architecture         | Unknown |
+-------------------------------+---------+
| Architecture Variant          | N/A     |
+-------------------------------+---------+
```

CVE-2022-1262P1.py

```
┌──(kali�kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P1.py ../../../Project/tenda-firmwares/i25_CE.zip
+------------------------------------------------------+-----------+
| Vulnerability Type                                   | Status    |
+======================================================+===========+
| Command Injection via pipes, semicolons, or parentheses | Not found |
+------------------------------------------------------+-----------+
| Command Injection via backticks                      | Not found |
+------------------------------------------------------+-----------+
| Command Injection via variable assignment            | Not found |
+------------------------------------------------------+-----------+
```

CVE-2022-1262P2.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P2.py ./_i25_CE.zip.extracted
No protest binary files found in the folder.
```

Log4jVulnerabilityDetection.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./Log4jVulnerabilityDetection.py ./_i25_CE.zip.extracted
Scanned Files:
./_i25_CE.zip.extracted/0.zip
./_i25_CE.zip.extracted/i25_CE.pdf
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/3EB01
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/22A78
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/35F2D
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/F1F6F
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/50F1B.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/8F976
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/8FCC1
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/4A735
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/50F1B
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/15DB1.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/53DB9
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/4ECEB
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/8FCC1.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/1A034.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/4ECEB.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/1A034
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/22A78.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/CEE2.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/C7A2A.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/C78E8
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/4A735.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/F6DF4
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/53A0E
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/C7A2A
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/4CA85.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/43B64.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/3A2CB
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/3A2CB.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/31486
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/4CA85
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/2C1A4
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/485FC.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/11191.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/8F976.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/F6DF4.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/F1F6F.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/CEE2
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/15DB1
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/C78E8.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/43B64
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/290.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/53A0E.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/27D48
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/2C1A4.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/11191
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/1E3B3
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/1E3B3.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/290
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/31486.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/485FC
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/27D48.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/53DB9.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/3EB01.zlib
./_i25_CE.zip.extracted/_i25_CE.pdf.extracted/35F2D.zlib
No potential Log4j exploits found in the folder.
```

7. i24 Firmware V2.0.0.7

Download Link:

https://down.tendacn.com/uploadfile/i24/i24V2.0%20Firmware%20V2.0.0.7.zip

firmware_analyzer.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./firmware_analyzer.py ../../../Project/tenda-firmwares/i24V2.0\ Firmware\ V2.0.0.7.zip
+-------------------------------+---------+
| Parameter                     | Value   |
+===============================+=========+
| CPIO Root Folder Addresses    | NA      |
+-------------------------------+---------+
| SquashFS Root Folder Addresses| NA      |
+-------------------------------+---------+
| Firmware Endianness           | Unknown |
+-------------------------------+---------+
| Entropy                       | NA      |
+-------------------------------+---------+
| First 4 bytes (xxd)           |         |
+-------------------------------+---------+
| Firmware Architecture         | Unknown |
+-------------------------------+---------+
| Architecture Variant          | N/A     |
+-------------------------------+---------+
```

CVE-2022-1262P1.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P1.py ../../../Project/tenda-firmwares/i24V2.0\ Firmware\ V2.0.0.7.zip
+-------------------------------------------------------+-----------+
| Vulnerability Type                                    | Status    |
+=======================================================+===========+
| Command Injection via pipes, semicolons, or parentheses | Not found |
+-------------------------------------------------------+-----------+
| Command Injection via backticks                       | Not found |
+-------------------------------------------------------+-----------+
| Command Injection via variable assignment             | Not found |
+-------------------------------------------------------+-----------+
```

CVE-2022-1262P2.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P2.py ./_i24V2.0\ Firmware\ V2.0.0.7.zip.extracted
No protest binary files found in the folder.
```

Log4jVulnerabilityDetection.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./Log4jVulnerabilityDetection.py ./_i24V2.0\ Firmware\ V2.0.0.7.zip.extracted
Scanned Files:
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/US_i24V2.0re_V2.0.0.7(10489)_CN&EN_TDE01.bin
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/0.zip
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/I24v2.0 Firmware Upgrade Note.docx
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/2470D.zip
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/_US_i24V2.0re_V2.0.0.7(10489)_CN&EN_TDE01.bin.extracted/2858.7z
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/_US_i24V2.0re_V2.0.0.7(10489)_CN&EN_TDE01.bin.extracted/2858
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/_I24v2.0 Firmware Upgrade Note.docx.extracted/[Content_Types].xml
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/_I24v2.0 Firmware Upgrade Note.docx.extracted/0.zip
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/_I24v2.0 Firmware Upgrade Note.docx.extracted/docProps/core.xml
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/_I24v2.0 Firmware Upgrade Note.docx.extracted/docProps/custom.xml
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/_I24v2.0 Firmware Upgrade Note.docx.extracted/docProps/app.xml
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/_I24v2.0 Firmware Upgrade Note.docx.extracted/word/settings.xml
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/_I24v2.0 Firmware Upgrade Note.docx.extracted/word/fontTable.xml
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/_I24v2.0 Firmware Upgrade Note.docx.extracted/word/numbering.xml
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/_I24v2.0 Firmware Upgrade Note.docx.extracted/word/document.xml
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/_I24v2.0 Firmware Upgrade Note.docx.extracted/word/styles.xml
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/_I24v2.0 Firmware Upgrade Note.docx.extracted/word/theme/theme1.xml
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/_I24v2.0 Firmware Upgrade Note.docx.extracted/word/media/image1.png
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/_I24v2.0 Firmware Upgrade Note.docx.extracted/word/media/_image1.png.extracted/4B.zlib
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/_I24v2.0 Firmware Upgrade Note.docx.extracted/word/media/_image1.png.extracted/4B
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/_I24v2.0 Firmware Upgrade Note.docx.extracted/word/_rels/document.xml.rels
./_i24V2.0 Firmware V2.0.0.7.zip.extracted/_I24v2.0 Firmware Upgrade Note.docx.extracted/_rels/.rels
No potential Log4j exploits found in the folder.
```

8. W9 Firmware V1.0.0.7

Download Link:

https://down.tendacn.com/uploadfile/W9/W9v1.0_V1.0.0.7(4456)_EN.zip

firmware_analyzer.py

```
┌──(kali㊥kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./firmware_analyzer.py ../../../Project/tenda-firmwares/W9v1.0_V1.0.0.7\(4456\)_EN.zip
+-------------------------------+---------------+
| Parameter                     | Value         |
+===============================+===============+
| CPIO Root Folder Addresses    | NA            |
+-------------------------------+---------------+
| SquashFS Root Folder Addresses | NA           |
+-------------------------------+---------------+
| Firmware Endianness           | Little Endian |
+-------------------------------+---------------+
| Entropy                       | NA            |
+-------------------------------+---------------+
| First 4 bytes (xxd)           |               |
+-------------------------------+---------------+
| Firmware Architecture         | Unknown       |
+-------------------------------+---------------+
| Architecture Variant          | N/A          |
+-------------------------------+---------------+
```

CVE-2022-1262P1.py

```
┌──(kali㊥kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P1.py ../../../Project/tenda-firmwares/W9v1.0_V1.0.0.7\(4456\)_EN.zip
+-------------------------------------------------------+-----------+
| Vulnerability Type                                    | Status    |
+=======================================================+===========+
| Command Injection via pipes, semicolons, or parentheses | Not found |
+-------------------------------------------------------+-----------+
| Command Injection via backticks                       | Not found |
+-------------------------------------------------------+-----------+
| Command Injection via variable assignment             | Not found |
+-------------------------------------------------------+-----------+
```

CVE-2022-1262P2.py

```
┌──(kali㊥kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P2.py ./_W9v1.0_V1.0.0.7\(4456\)_EN.zip.extracted
No protest binary files found in the folder.
```

Log4jVulnerabilityDetection.py

```
┌──(kali㊥kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./Log4jVulnerabilityDetection.py ./_W9v1.0_V1.0.0.7\(4456\)_EN.zip.extracted
Scanned Files:
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/0.zip
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/US_W9V1.0re_V1.0.0.7(4456)_CN&EN_TDC01.bin
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/W9v1.0 Firmware Upgrage Note.docx
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_US_W9V1.0re_V1.0.0.7(4456)_CN&EN_TDC01.bin.extracted/1D9452.squashfs
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_US_W9V1.0re_V1.0.0.7(4456)_CN&EN_TDC01.bin.extracted/2858.7z
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_US_W9V1.0re_V1.0.0.7(4456)_CN&EN_TDC01.bin.extracted/2858
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_US_W9V1.0re_V1.0.0.7(4456)_CN&EN_TDC01.bin.extracted/_2858.extracted/4A
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_US_W9V1.0re_V1.0.0.7(4456)_CN&EN_TDC01.bin.extracted/squashfs-root/init
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_US_W9V1.0re_V1.0.0.7(4456)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_US_W9V1.0re_V1.0.0.7(4456)_CN&EN_TDC01.bin.extracted/squashfs-root/debu
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_US_W9V1.0re_V1.0.0.7(4456)_CN&EN_TDC01.bin.extracted/squashfs-root/etc
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_US_W9V1.0re_V1.0.0.7(4456)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_US_W9V1.0re_V1.0.0.7(4456)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_US_W9V1.0re_V1.0.0.7(4456)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
```

```
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_US_W9V1.0re_V1.0.0.7(4456)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_US_W9V1.0re_V1.0.0.7(4456)_CN&EN_TDC01.bin.extracted/squashfs-root/webr
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_US_W9V1.0re_V1.0.0.7(4456)_CN&EN_TDC01.bin.extracted/squashfs-root-0/sb
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_W9v1.0 Firmware Upgrage Note.docx.extracted/[Content_Types].xml
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_W9v1.0 Firmware Upgrage Note.docx.extracted/0.zip
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_W9v1.0 Firmware Upgrage Note.docx.extracted/docProps/core.xml
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_W9v1.0 Firmware Upgrage Note.docx.extracted/docProps/app.xml
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_W9v1.0 Firmware Upgrage Note.docx.extracted/word/settings.xml
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_W9v1.0 Firmware Upgrage Note.docx.extracted/word/webSettings.xml
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_W9v1.0 Firmware Upgrage Note.docx.extracted/word/fontTable.xml
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_W9v1.0 Firmware Upgrage Note.docx.extracted/word/numbering.xml
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_W9v1.0 Firmware Upgrage Note.docx.extracted/word/document.xml
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_W9v1.0 Firmware Upgrage Note.docx.extracted/word/styles.xml
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_W9v1.0 Firmware Upgrage Note.docx.extracted/word/theme/theme1.xml
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_W9v1.0 Firmware Upgrage Note.docx.extracted/word/_rels/document.xml.rel
./_W9v1.0_V1.0.0.7(4456)_EN.zip.extracted/W9v1.0_V1.0.0.7(4456)_EN/_W9v1.0 Firmware Upgrage Note.docx.extracted/_rels/.rels
No potential Log4j exploits found in the folder.
```

8. W6-S Firmware V1.0.0.4

Download Link:

https://down.tendacn.com/uploadfile/W6-S/W6-S_V1.0.0.4(510)_EN.zip

firmware_analyzer.py

```
┌──(kali㋡kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./firmware_analyzer.py ../../../Project/tenda-firmwares/W6-S_V1.0.0.4\(510\)_EN.zip
+-------------------------------+---------+
| Parameter                     | Value   |
+===============================+=========+
| CPIO Root Folder Addresses    | NA      |
+-------------------------------+---------+
| SquashFS Root Folder Addresses | NA     |
+-------------------------------+---------+
| Firmware Endianness           | Unknown |
+-------------------------------+---------+
| Entropy                       | NA      |
+-------------------------------+---------+
| First 4 bytes (xxd)           |         |
+-------------------------------+---------+
| Firmware Architecture         | Unknown |
+-------------------------------+---------+
```

```
| Architecture Variant       | N/A     |
+------------------------------+--------+
```

CVE-2022-1262P1.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P1.py ../../../Project/tenda-firmwares/W6-S_V1.0.0.4\(510\)_EN.zip
+----------------------------------------------------------+-----------+
| Vulnerability Type                                       | Status    |
+==========================================================+===========+
| Command Injection via pipes, semicolons, or parentheses  | Not found |
+----------------------------------------------------------+-----------+
| Command Injection via backticks                          | Not found |
+----------------------------------------------------------+-----------+
| Command Injection via variable assignment                | Not found |
+----------------------------------------------------------+-----------+
```

CVE-2022-1262P2.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P2.py ./_W6-S_V1.0.0.4\(510\)_EN.zip.extracted
No protest binary files found in the folder.
```

Log4jVulnerabilityDetection.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./Log4jVulnerabilityDetection.py ./_W6-S_V1.0.0.4\(510\)_EN.zip.extracted
Scanned Files:
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/0.zip
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/US_W6-SV1.0RE_V1.0.0.4(510)_CN&EN_TDC01.bin
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/W6-Sv1.0 Firmware Upgrage Note.docx
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_US_W6-SV1.0RE_V1.0.0.4(510)_CN&EN_TDC01.bin.extracted/FA062.squashfs
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_US_W6-SV1.0RE_V1.0.0.4(510)_CN&EN_TDC01.bin.extracted/2858.7z
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_US_W6-SV1.0RE_V1.0.0.4(510)_CN&EN_TDC01.bin.extracted/2858
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_US_W6-SV1.0RE_V1.0.0.4(510)_CN&EN_TDC01.bin.extracted/squashfs-root/init
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_US_W6-SV1.0RE_V1.0.0.4(510)_CN&EN_TDC01.bin.extracted/squashfs-root/webroot
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_US_W6-SV1.0RE_V1.0.0.4(510)_CN&EN_TDC01.bin.extracted/squashfs-root/etc
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_US_W6-SV1.0RE_V1.0.0.4(510)_CN&EN_TDC01.bin.extracted/squashfs-root/webroot_r
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_US_W6-SV1.0RE_V1.0.0.4(510)_CN&EN_TDC01.bin.extracted/squashfs-root/webroot_r
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_US_W6-SV1.0RE_V1.0.0.4(510)_CN&EN_TDC01.bin.extracted/squashfs-root/webroot_r
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_US_W6-SV1.0RE_V1.0.0.4(510)_CN&EN_TDC01.bin.extracted/squashfs-root/webroot_r
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_US_W6-SV1.0RE_V1.0.0.4(510)_CN&EN_TDC01.bin.extracted/squashfs-root/webroot_r
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_US_W6-SV1.0RE_V1.0.0.4(510)_CN&EN_TDC01.bin.extracted/squashfs-root/webroot_r
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_US_W6-SV1.0RE_V1.0.0.4(510)_CN&EN_TDC01.bin.extracted/squashfs-root/webroot_r
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_US_W6-SV1.0RE_V1.0.0.4(510)_CN&EN_TDC01.bin.extracted/squashfs-root/webroot_r
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_US_W6-SV1.0RE_V1.0.0.4(510)_CN&EN_TDC01.bin.extracted/squashfs-root/webroot_r
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_US_W6-SV1.0RE_V1.0.0.4(510)_CN&EN_TDC01.bin.extracted/squashfs-root-0/sbin/iw
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_W6-Sv1.0 Firmware Upgrage Note.docx.extracted/[Content_Types].xml
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_W6-Sv1.0 Firmware Upgrage Note.docx.extracted/0.zip
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_W6-Sv1.0 Firmware Upgrage Note.docx.extracted/docProps/core.xml
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_W6-Sv1.0 Firmware Upgrage Note.docx.extracted/docProps/app.xml
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_W6-Sv1.0 Firmware Upgrage Note.docx.extracted/word/settings.xml
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_W6-Sv1.0 Firmware Upgrage Note.docx.extracted/word/webSettings.xml
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_W6-Sv1.0 Firmware Upgrage Note.docx.extracted/word/fontTable.xml
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_W6-Sv1.0 Firmware Upgrage Note.docx.extracted/word/numbering.xml
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_W6-Sv1.0 Firmware Upgrage Note.docx.extracted/word/document.xml
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_W6-Sv1.0 Firmware Upgrage Note.docx.extracted/word/styles.xml
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_W6-Sv1.0 Firmware Upgrage Note.docx.extracted/word/theme/theme1.xml
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_W6-Sv1.0 Firmware Upgrage Note.docx.extracted/word/_rels/document.xml.rels
./_W6-S_V1.0.0.4(510)_EN.zip.extracted/W6-S_V1.0.0.4(510)_EN/_W6-Sv1.0 Firmware Upgrage Note.docx.extracted/_rels/.rels
No potential Log4j exploits found in the folder.
```

9. W15-Pro CE

Download Link:

https://down.tendacn.com/uploadfile/W15-Pro/W15-Pro%20ce.zip

firmware_analyzer.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./firmware_analyzer.py ../../../Project/tenda-firmwares/W15-Pro\ ce.zip
+------------------------------+--------+
| Parameter                    | Value  |
+==============================+========+
| CPIO Root Folder Addresses   | NA     |
+------------------------------+--------+
| SquashFS Root Folder Addresses | NA   |
+------------------------------+--------+
| Firmware Endianness          | Unknown |
+------------------------------+--------+
| Entropy                      | NA     |
+------------------------------+--------+
| First 4 bytes (xxd)          |        |
+------------------------------+--------+
| Firmware Architecture        | Unknown |
+------------------------------+--------+
| Architecture Variant         | N/A    |
+------------------------------+--------+
```

CVE-2022-1262P1.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P1.py ../../../Project/tenda-firmwares/W15-Pro\ ce.zip
+---------------------------------------------------------+-----------+
| Vulnerability Type                                      | Status    |
+=========================================================+===========+
| Command Injection via pipes, semicolons, or parentheses | Not found |
+---------------------------------------------------------+-----------+
| Command Injection via backticks                         | Not found |
+---------------------------------------------------------+-----------+
| Command Injection via variable assignment               | Not found |
+---------------------------------------------------------+-----------+
```

CVE-2022-1262P2.py

```
┌──(kali㊙kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P2.py ./_W15-Pro\ ce.zip.extracted
No protest binary files found in the folder.
```

Log4jVulnerabilityDetection.py

```
┌──(kali㊙kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./Log4jVulnerabilityDetection.py ./_W15-Pro\ ce.zip.extracted
Scanned Files:
./_W15-Pro ce.zip.extracted/0.zip
./_W15-Pro ce.zip.extracted/W15-Pro ce.pdf
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/19BFD4.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/152D4
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/11C5B2
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/19BFD4
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/EF06E
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/4A883.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/EF06E.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/12E393.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/CA177.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/1A76D2.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/4A883
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/B879E.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/17F881
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/17F881.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/19F3
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/DCC40
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/19BCD1
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/140703.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/3917E
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/10A65C.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/6E61E.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/A6507
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/1B1426.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/1524E9
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/92CE7.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/192800.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/17FCA6
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/100D0C
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/1A76D2
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/5C83A.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/197078.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/80413
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/26ABD.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/1B1426
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/10A65C
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/164D74
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/CA177
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/152D4.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/A6507.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/197078
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/17FCA6.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/80413.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/164D74.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/100D0C.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/19BCD1.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/16529C.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/5C83A
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/6E61E
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/1971B7
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/16529C
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/92CE7
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/1A74E2
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/140703
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/3917E.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/11C5B2.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/DCC40.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/B879E
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/26ABD
```

```
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/1524E9.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/19F3.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/1971B7.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/12E393
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/1A74E2.zlib
./_W15-Pro ce.zip.extracted/_W15-Pro ce.pdf.extracted/192800
No potential Log4j exploits found in the folder.
```

10. W12V2.0 Firmware V2.0.0.1

Download Link:

https://down.tendacn.com/uploadfile/W12/W12v2.0%20Firmware%20V2.0.0.1.zip

firmware_analyzer.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./firmware_analyzer.py ../../../Project/tenda-firmwares/W12v2.0\ Firmware\ V2.0.0.1.zip
+-------------------------------+------------+
| Parameter                     | Value      |
+===============================+============+
| CPIO Root Folder Addresses    | NA         |
+-------------------------------+------------+
| SquashFS Root Folder Addresses| NA         |
+-------------------------------+------------+
| Firmware Endianness           | Big Endian |
+-------------------------------+------------+
| Entropy                       | NA         |
+-------------------------------+------------+
| First 4 bytes (xxd)           |            |
+-------------------------------+------------+
| Firmware Architecture         | Unknown    |
+-------------------------------+------------+
| Architecture Variant          | N/A        |
+-------------------------------+------------+
```

CVE-2022-1262P1.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P1.py ../../../Project/tenda-firmwares/W12v2.0\ Firmware\ V2.0.0.1.zip
```

```
| Vulnerability Type                                     | Status    |
+=======================================================+===========+
| Command Injection via pipes, semicolons, or parentheses | Not found |
+-------------------------------------------------------+-----------+
| Command Injection via backticks                        | Not found |
+-------------------------------------------------------+-----------+
| Command Injection via variable assignment              | Not found |
+-------------------------------------------------------+-----------+
```

CVE-2022-1262P2.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./CVE-2022-1262P2.py ./_W12v2.0\ Firmware\ V2.0.0.1.zip.extracted
No protest binary files found in the folder.
```

Log4jVulnerabilityDetection.py

```
┌──(kali㉿kali)-[~/Desktop/INSE6120-Fall2023-Project-Group7/Rakshith/static-analysis-scripts]
└─$ python3 ./Log4jVulnerabilityDetection.py ./_W12v2.0\ Firmware\ V2.0.0.1.zip.extracted
Scanned Files:
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/0.zip
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/W12V2.0 Firmware Upgrage Note.docx
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/~$2V2.0 Firmware Upgrage Note.docx
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/US_W12V2.0re_V2.0.0.1(9821)_CN&EN_TDE01.bin
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/_W12V2.0 Firmware Upgrage Note.docx.extracted/[Content_Types].xml
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/_W12V2.0 Firmware Upgrage Note.docx.extracted/0.zip
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/_W12V2.0 Firmware Upgrage Note.docx.extracted/docProps/core.xml
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/_W12V2.0 Firmware Upgrage Note.docx.extracted/docProps/custom.xml
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/_W12V2.0 Firmware Upgrage Note.docx.extracted/docProps/app.xml
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/_W12V2.0 Firmware Upgrage Note.docx.extracted/word/settings.xml
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/_W12V2.0 Firmware Upgrage Note.docx.extracted/word/webSettings.xml
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/_W12V2.0 Firmware Upgrage Note.docx.extracted/word/fontTable.xml
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/_W12V2.0 Firmware Upgrage Note.docx.extracted/word/numbering.xml
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/_W12V2.0 Firmware Upgrage Note.docx.extracted/word/document.xml
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/_W12V2.0 Firmware Upgrage Note.docx.extracted/word/footnotes.xml
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/_W12V2.0 Firmware Upgrage Note.docx.extracted/word/endnotes.xml
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/_W12V2.0 Firmware Upgrage Note.docx.extracted/word/styles.xml
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/_W12V2.0 Firmware Upgrage Note.docx.extracted/word/theme/theme1.xml
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/_W12V2.0 Firmware Upgrage Note.docx.extracted/word/media/image1.png
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/_W12V2.0 Firmware Upgrage Note.docx.extracted/word/media/_image1.png.extracted/29.zlib
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/_W12V2.0 Firmware Upgrage Note.docx.extracted/word/media/_image1.png.extracted/29
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/_W12V2.0 Firmware Upgrage Note.docx.extracted/word/_rels/document.xml.rels
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/_W12V2.0 Firmware Upgrage Note.docx.extracted/_rels/.rels
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/__US_W12V2.0re_V2.0.0.1(9821)_CN&EN_TDE01.bin.extracted/2858.7z
./_W12v2.0 Firmware V2.0.0.1.zip.extracted/W12v2.0/__US_W12V2.0re_V2.0.0.1(9821)_CN&EN_TDE01.bin.extracted/2858
No potential Log4j exploits found in the folder.
```