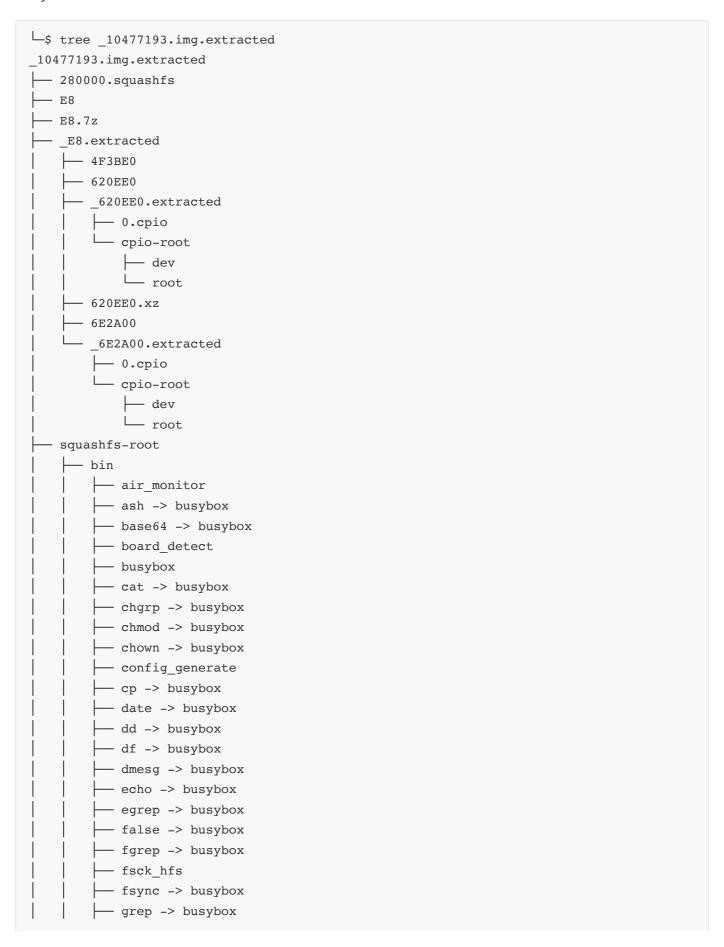
## Step 1. Use binwalk -eM firmware to recursively extact the filesystem.

filesystem extracted



```
— gunzip -> busybox
 — gzip -> busybox
 - ipcalc.sh
 — kill -> busybox
ln -> busybox
 — lock -> busybox
login -> busybox
ls -> busybox
-- mkdir -> busybox
mknod -> busybox
- mkntfs
mktemp -> busybox
-- mount -> busybox
-- mpstat -> busybox
- multithread_malloc_testcode
multithread_malloc_testcode_t0
multithread_malloc_testcode_t1
multithread_malloc_testcode_t2
-- mv -> busybox
-- netmsg -> busybox
- netstat -> busybox
- newfs_hfs
- nice -> busybox
- ntfsck
- ntfsdebug
- ntfslabel
— opkg
— pidof -> busybox
ping -> busybox
 — ping6 -> busybox
ps -> busybox
pwd -> busybox
rm -> busybox
- rmdir -> busybox
-- sed -> busybox
-- sh -> busybox
-- sleep -> busybox
sync -> busybox
tar -> busybox
 — thfslabel
-- touch -> busybox
true -> busybox
 — tsmb-cfg
 — tsmb-passwd
├─ tsmb-privilege
- tsmb-server
— ubus
- uclient-fetch
-- umount -> busybox
```

uname -> busybox	
— vi -> busybox	
wget -> uclient-fetch	
— dev	
— etc	
avahi-daemon.conf	
L services	
http.service	
ssh.service	
banner	
banner.failsafe	
banner.mtk	
bndstrg.conf	
board.d	
02_network	
config	
adv-route	
daemon_control	
ddns — ddns	
dhcp	
dhcp-opkg	
— firewall	
firewall_global	
macaddr	
network_database	
parental_ctrl	
— vlan_database	
wireless	
crontabs	
system.d	
avahi-dbus.conf	
ddns	
services	
L services_ipv6	
dnsmasq.conf	
unsmasq.com	

```
— ethernet cfg.txt
 ethertypes
 - firewall.user
 - fstab
 — group
 — hosts
 hotplug.d
   - block
       └─ 10-mount
     – firmware
       └─ 11-mtk-wifi-e2p
     — iface
       - 00-netstate
       - 15-teql
       — 20-firewall
       - 50-miniupnpd
       — 95-ddns
       98-mtk-vpn
       └─ 99-mtk-lro
     - net
       └─ 00-sysctl
     - ntp
       L_ 25-dnsmasqsec
- hotplug.json
- hotplug-preinit.json
icon_blue_eng_default.png
- icon blue eng.png
- icon_blue.png
icon_blue_zxx_default.png
- icon blue zxx.png
icon_green_eng_default.png
icon_green_eng.png
icon_green.png
- icon green zxx default.png
icon_green_zxx.png
icon_orange_eng_default.png
icon_orange_eng.png
icon_orange.png
- icon orange zxx default.png
icon_orange_zxx.png
icon_red_eng_default.png
icon red eng.png
- icon_red.png
icon_red_zxx_default.png
icon_red_zxx.png
- init.d
  — atd
   - avahi-daemon
   - boot
```

	— cron
	dbus
	ddns ddns
	— dnsmasq
	— done
	— file_sharing
	— firewall
	— firmware.sh
	fstab
	— fwdd
	— gpio_switch
	igmpproxy
	lighttpd
i i	
i i	miniupnpd
	mtkhnat
	— netbios
	— network
i i	— odhcpd
ii	— powersaving
ii	proprietary
ii	quagga
i i	rpcd
ii	sysctl
ii	sysfixtime
i i	sysntpd
ii	system
i i	telnet
ii	— umount
ii	— urandom_seed
ii	xl2tpd
	— inittab
	iproute2
	rt_protos
	rt_tables
	kernel.config
i i	lighttpd
i i	conf.d
i i	- 10-redirect.conf
i i	20-auth.conf
i i	30-access.conf
	30-accesslog.conf
i i	30-alias.conf
	30-cgi.conf
i i	30-compress.conf
	30-fastcgi.conf
	30-scgi.conf
	30-setenv.conf

```
- 30-ssi.conf
        - 30-status.conf
    - lighttpd.conf
    lighttpd_guest.conf
  lighttpd_pc.conf
  - mime.conf
  L ssl
— localtime -> /tmp/localtime
— login.defs
logrotate.conf
— logrotate.d
— Makefile
— map
  └─ 1905d.cfg
- modules-boot.d
  - 02-crypto-hash -> ../modules.d/02-crypto-hash
    — 09-crypto-aead -> ../modules.d/09-crypto-aead
  - 09-crypto-manager -> ../modules.d/09-crypto-manager
  - 20-usb-core -> ../modules.d/20-usb-core
  - 30-gpio-button-hotplug -> ../modules.d/30-gpio-button-hotplug
  - 40-ata-ahci-mtk -> ../modules.d/40-ata-ahci-mtk
  - 40-scsi-core -> ../modules.d/40-scsi-core
    — 40-usb2 -> ../modules.d/40-usb2
    - 50-usb-ohci -> ../modules.d/50-usb-ohci
  -- 54-usb3 -> ../modules.d/54-usb3
  - mmc -> ../modules.d/mmc
    - sdhci -> ../modules.d/sdhci
  - sdhci-mtk -> ../modules.d/sdhci-mtk
  usb-storage -> ../modules.d/usb-storage
 - modules.d
  - 02-crypto-hash
  - 09-crypto-aead
  - 09-crypto-arc4
  - 09-crypto-authenc
  - 09-crypto-ecb
  - 09-crypto-manager
  - 09-crypto-null
  - 09-crypto-pcompress
  - 09-crypto-shal
  ── 09-11c
  — 10-stp
  - 11-bridge
  - 20-usb-core
    — 30-gpio-button-hotplug
  - 31-iptunnel
  ├─ 31-iptunnel4
  - 32-12tp
  - 32-sit
  — 32-udptunnel4
```

— 32-udptunnel6
— 34-ifb
— 39-gre
— 40-ata-ahci-mtk
— 40-scsi-core
— 40-usb2
— 42-ip6tables
— 50-cryptodev
50-usb-ohci
54-usb3
— 70-sched-core
— 71-sched-connmark
— 80-cryptodev
- br-netfilter
— ebtables
— ebtables-ipv4
ipt-conntrack
ipt-conntrack-extra
— ipt-core
ipt-ipopt
ipt-nat
ipt-nfqueue
lib-crc-ccitt
lib-textsearch
— mapfilter
— mmc
— mppe
— mt7622
— mtfwd
— mt_wifi
— nf-conntrack
— nf-conntrack6
- nf-conntrack-netlink
— nf-ipt
— nf-ipt6
— nf-nat
— nf-nathelper
- nf-nathelper-extra
— nfnetlink
— nfnetlink-queue
— ррр
— pppoe
pppol2tp
— pptp
— sdhci
— sdhci-mtk
L— usb-storage
<pre>mtab -&gt; /proc/mounts</pre>
nsswitch.conf

```
- openwrt.config
  - openwrt_release
 - openwrt_version
 opkg
   - customfeeds.conf
   - distfeeds.conf
   └─ keys
       5151f69420c3f508
       72a57f2191b211e0
         - 792d9d9b39f180dc
       -- 9ef4694208102c43
       ─ b5043e70f9a75cde

— d9c10c7f4f3e1af6

         – dace9d4df16896bf
       dd6de0d06bbd3d85
- opkg.conf
 - os-release -> ../usr/lib/os-release
- passwd
 — ppp
   - chap-secrets
   — filter
   - options
   - options.pptp
   — options.xl2tpd
   resolv.conf -> /tmp/resolv.conf.ppp
 — preinit
 - profile
- protocols
 — quagga
   - ripd.conf
   __ zebra.conf
 - rc.button
   — failsafe
   - power
   - reset
     — rfkill
   L wps
 - rc.common
  - rc.d
   ├─ K10ddns -> ../init.d/ddns
   ── K10fwdd -> ../init.d/fwdd
   - K10gpio switch -> ../init.d/gpio switch
   K15firmware.sh -> ../init.d/firmware.sh
    ├── K15miniupnpd -> ../init.d/miniupnpd
   ├── K85odhcpd -> ../init.d/odhcpd
   ── K89log -> ../init.d/log
   - K90network -> ../init.d/network
   ├── K90sysfixtime -> ../init.d/sysfixtime
   - K98boot -> ../init.d/boot
```

```
— K99umount -> ../init.d/umount
     — S00sysfixtime -> ../init.d/sysfixtime
     — S10boot -> ../init.d/boot
     - S10fwdd -> ../init.d/fwdd
    S10system -> ../init.d/system
     — S11sysctl -> ../init.d/sysctl
   ├── S12log -> ../init.d/log
    S12rpcd -> ../init.d/rpcd
   - S15firmware.sh -> ../init.d/firmware.sh
     - S19dnsmasq -> ../init.d/dnsmasq
    ├── S19firewall -> ../init.d/firewall
     — S19mtkhnat -> ../init.d/mtkhnat
     — S20network -> ../init.d/network
    S35odhcpd -> ../init.d/odhcpd
    S40fstab -> ../init.d/fstab
     - S50atd -> ../init.d/atd
     - S50cron -> ../init.d/cron
   S50lighttpd -> ../init.d/lighttpd
    S60dbus -> ../init.d/dbus
    S60file_sharing -> ../init.d/file_sharing
   - S60netbios -> ../init.d/netbios
    - S60quagga -> ../init.d/quagga
   S60xl2tpd -> ../init.d/xl2tpd
     — S61avahi-daemon -> ../init.d/avahi-daemon
    - S90telnet -> ../init.d/telnet
   S94miniupnpd -> ../init.d/miniupnpd
     - S95ddns -> ../init.d/ddns
    - S95done -> ../init.d/done
     — S96led -> ../init.d/led
     — S98gpio switch -> ../init.d/gpio switch
   S98sysntpd -> ../init.d/sysntpd
   S99igmpproxy -> ../init.d/igmpproxy
   S99powersaving -> ../init.d/powersaving
     - S99proprietary -> ../init.d/proprietary
   S99urandom_seed -> ../init.d/urandom_seed
- rc.local
 — resolv.conf -> /tmp/resolv.conf
 - sdk.version
 — services
 — shadow
 - shells
 — ssl
       - 02265526.0 -> Entrust_Root_Certification_Authority_-_G2.crt
       - 024dc131.0 -> Microsec_e-Szigno_Root_CA.crt
       - 03179a64.0 -> Staat_der_Nederlanden_EV_Root_CA.crt
       - 034868d6.0 -> Swisscom_Root_EV CA 2.crt
       — 062cdee6.0 -> GlobalSign_Root_CA_-_R3.crt
       - 064e0aa9.0 -> QuoVadis_Root_CA_2_G3.crt
```

```
- 080911ac.0 -> QuoVadis Root CA.crt
               - 0810ba98.0 -> Root_CA_Generalitat_Valenciana.crt
                - 09789157.0 -> Starfield_Services_Root_Certificate_Authority_-
G2.crt
                - 0b1b94ef.0 -> CFCA_EV_ROOT.crt
               - 0c4c9b6c.0 -> Global Chambersign Root - 2008.crt
               ─ 0d1b923b.0 -> S-
TRUST_Authentication_and_Encryption_Root_CA_2005_PN.crt
               - 106f3e4d.0 -> Entrust Root Certification Authority - EC1.crt
                 - 116bf586.0 -> GeoTrust_Primary_Certification_Authority_-_G2.crt
                - 128805a3.0 -> EE Certification Centre Root CA.crt
               - 157753a5.0 -> AddTrust External Root.crt
               -- 1636090b.0 ->
Hellenic_Academic_and_Research_Institutions_RootCA_2011.crt
               1874d4aa.0 ->
China Internet Network Information Center EV Certificates Root.crt
               - 18856ac4.0 -> SecureSign_RootCAll.crt
               - 19c1fa33.0 -> S-TRUST_Universal_Root_CA.crt
               - 1d3472b9.0 -> GlobalSign ECC Root CA - R5.crt
               - 1e08bfd1.0 -> IdenTrust Public Sector Root CA 1.crt
               - 1e09d511.0 -> T-TeleSec_GlobalRoot_Class_2.crt
                - 244b5494.0 -> DigiCert_High_Assurance_EV_Root_CA.crt
               24ad0b63.0 ->
Verisign_Class_1_Public_Primary_Certification_Authority.crt
               — 26eaad2f.0 -> CA_WoSign_ECC_Root.crt
               2ae6433e.0 -> CA_Disig_Root_R2.crt
                 - 2b349938.0 -> AffirmTrust Commercial.crt
               - 2c11d503.0 -> OpenTrust_Root_CA_G3.crt
               - 2c543cd1.0 -> GeoTrust_Global_CA.crt
               2e4eed3c.0 -> thawte_Primary_Root_CA.crt
                - 2e5ac55d.0 -> DST_Root CA X3.crt
               -- 32888f65.0 ->
Hellenic_Academic_and_Research_Institutions_RootCA_2015.crt
               349f2832.0 -> EC-ACC.crt
                - 3513523f.0 -> DigiCert Global Root CA.crt
               - 381ce4dd.0 -> ACEDICOM_Root.crt
               - 3b2716e5.0 -> EBG_Elektronik_Sertifika_Hizmet_Sağlayıcısı.crt
               -- 3bde41ac.0 ->
Autoridad de Certificacion Firmaprofesional CIF A62634068.crt
               - 3e45d192.0 -> Hongkong_Post_Root_CA_1.crt
               -- 3ee7e181.0 -> IGC_A.crt
                - 3efd4dc0.0 -> Swisscom_Root_CA_2.crt
               - 40193066.0 -> Certum_Trusted_Network_CA_2.crt
                - 4042bcee.0 -> ISRG Root X1.crt
                - 40547a79.0 -> COMODO Certification Authority.crt
               415660c1.0 ->
Verisign_Class_3_Public_Primary_Certification_Authority.crt
               — 4304c5e5.0 -> Network_Solutions_Certificate_Authority.crt
               — 442adcac.0 -> Certum_Root_CA.crt
```

```
- 451b5485.0 -> Certplus Root CA G2.crt
                 - 480720ec.0 -> GeoTrust_Primary_Certification_Authority.crt
                48bec511.0 -> Certum Trusted Network CA.crt
                 - 4a6481c9.0 -> GlobalSign Root CA - R2.crt
                4bfab552.0 -> Starfield_Root_Certificate_Authority_-_G2.crt
               - 4f316efb.0 -> SwissSign Gold CA - G2.crt
               - 5273a94c.0 -> E-Tugra_Certification_Authority.crt
                - 5443e9e3.0 -> T-TeleSec GlobalRoot Class 3.crt
               - 54657681.0 -> Buypass Class 2 Root CA.crt
                - 5620c4aa.0 -> TC_TrustCenter_Class_3_CA_II.crt
                - 56657bde.0 -> Comodo Trusted Services root.crt
               - 578d5c04.0 -> Equifax Secure CA.crt
               - 57bbd831.0 -> ApplicationCA_-_Japanese_Government.crt
               - 57bcb2da.0 -> SwissSign_Silver_CA_-_G2.crt
                - 592c0a9a.0 -> TURKTRUST Certificate Services Provider Root 2007.crt
               - 5a4d6896.0 -> Staat der Nederlanden Root CA - G3.crt
               -- 5ad8a5d6.0 -> GlobalSign_Root_CA.crt
               - 5c44d531.0 -> Staat_der_Nederlanden_Root_CA_-_G2.crt
               - 5cd81ad7.0 -> TeliaSonera Root CA v1.crt
               - 5d63b0ae.0 -> WoSign China.crt
               - 5f15c80c.0 -> TWCA Global Root CA.crt
                - 607986c7.0 -> DigiCert_Global_Root_G2.crt
               - 608a55ad.0 -> OpenTrust Root CA G2.crt
               - 6410666e.0 -> Taiwan GRCA.crt
                - 653b494a.0 -> Baltimore CyberTrust Root.crt
               65b876bd.0 -> TÜBİTAK_UEKAE_KÖk_Sertifika_Hizmet_Sağlayıcısı_-
Sürüm 3.crt
               ── 667c66d4.0 -> Swisscom Root CA 1.crt
               - 6b99d060.0 -> Entrust_Root_Certification_Authority.crt
               - 6f2c1157.0 -> AC_Raíz_Certicámara_S.A..crt
               - 706f604c.0 -> XRamp_Global_CA_Root.crt
                - 749e9e03.0 -> QuoVadis Root CA 1 G3.crt
               - 75d1b2ed.0 -> DigiCert_Trusted_Root_G4.crt
                - 76cb8f92.0 -> Cybertrust Global Root.crt
                - 76faf6c0.0 -> QuoVadis_Root_CA_3.crt
               -- 7719f463.0 ->
Hellenic_Academic_and_Research_Institutions_ECC_RootCA_2015.crt
               - 790a7190.0 -> DST_ACES_CA_X6.crt
               7992b8bb.0 ->
TÜRKTRUST Elektronik Sertifika Hizmet Sağlayıcısı H5.crt
               - 79ad8b43.0 -> Equifax_Secure_eBusiness_CA_1.crt
               -- 7d0b38bd.0 ->
VeriSign_Class_3_Public_Primary_Certification_Authority_-_G4.crt
               - 7d5a75e4.0 -> WellsSecure Public Root Certificate Authority.crt
                - 7f3d5d1d.0 -> DigiCert Assured ID Root G3.crt
               - 8096d0a9.0 -> WoSign.crt
               - 812e17de.0 -> Deutsche_Telekom_Root CA 2.crt
               - 8160b96c.0 -> Microsec_e-Szigno_Root_CA_2009.crt
               - 861a399d.0 -> AddTrust_Low-Value_Services_Root.crt
```

```
- 87229d21.0 -> OpenTrust Root CA G1.crt
               - 876f1e28.0 -> StartCom_Certification_Authority_G2.crt
                - 8867006a.0 -> GeoTrust Universal CA 2.crt
                 — 8b59b1ad.0 -> AddTrust Public Services Root.crt
               - 8d86cdd1.0 -> certSIGN_ROOT_CA.crt
               - 9007ae68.0 -> CA Disig Root R1.crt
               - 9168f543.0 -> Certplus_Root_CA_G1.crt
               - 930ac5d2.0 -> Actalis_Authentication Root CA.crt
               - 93bc0acc.0 -> AffirmTrust Networking.crt
               - 988a38cb.0 -> NetLock_Arany_=Class_Gold=_Főtanúsítvány.crt
               - 9c2e7d30.0 -> Sonera Class 2 Root CA.crt
               - 9c8dfbd4.0 -> AffirmTrust Premium ECC.crt
               - 9d04f354.0 -> DigiCert_Assured_ID_Root_G2.crt
               - 9d520b32.0 -> Security_Communication_EV_RootCA1.crt
               - 9f0f5fd6.0 -> Certinomis - Root CA.crt
               - a760e1bd.0 -> Visa eCommerce Root.crt
               - a8dee976.0 -> SwissSign_Platinum_CA_-_G2.crt
               - a94d09e5.0 -> ACCVRAIZ1.crt
               - ACCVRAIZ1.crt
               ACEDICOM Root.crt
               — AC_Raíz_Certicámara_S.A..crt
               - Actalis_Authentication_Root_CA.crt
               - ad088eld.0 -> GeoTrust Universal CA.crt
               - AddTrust External Root.crt
               — AddTrust_Low-Value_Services_Root.crt
               - AddTrust_Public_Services_Root.crt

    AddTrust Qualified Certificates Root.crt

               - ae8153b9.0 -> StartCom Certification Authority.crt
               - ae8153b9.1 -> StartCom_Certification_Authority_2.crt
               - aee5f10d.0 -> Entrust.net_Premium_2048_Secure_Server_CA.crt
               — AffirmTrust_Commercial.crt
               - AffirmTrust_Networking.crt
               - AffirmTrust_Premium.crt
               AffirmTrust Premium ECC.crt
               - ApplicationCA - Japanese Government.crt
               - Atos_TrustedRoot_2011.crt
               — Autoridad_de_Certificacion_Firmaprofesional_CIF_A62634068.crt
               b0e59380.0 -> GlobalSign_ECC_Root_CA_-_R4.crt
               b1159c4c.0 -> DigiCert Assured ID Root CA.crt
               b13cc6df.0 -> UTN USERFirst Hardware Root CA.crt
               blb8a7f3.0 -> OISTE_WISeKey_Global_Root_GA_CA.crt
               b204d74a.0 ->
VeriSign_Class_3_Public_Primary_Certification_Authority_-_G5.crt
               - b66938e9.0 -> Secure Global CA.crt
                ├── b727005e.0 -> AffirmTrust Premium.crt
               - b7a5b843.0 -> TWCA_Root_Certification_Authority.crt
               ba89ed3b.0 -> thawte_Primary_Root CA - G3.crt
               Baltimore_CyberTrust_Root.crt
               bb2d49a0.0 -> ComSign_CA.crt
```

```
bd1910d4.0 -> CNNIC ROOT.crt
               Buypass_Class_2_CA_1.crt
               - Buypass Class 2 Root CA.crt
                 - Buypass Class 3 Root CA.crt
               c01cdfa2.0 -> VeriSign_Universal_Root_Certification_Authority.crt
               - c089bbbd.0 -> thawte Primary Root CA - G2.crt
               -- c0ff1f52.0 ->
Verisign Class 3 Public Primary Certification Authority - G3.crt
               - c28a8a30.0 -> D-TRUST Root Class 3 CA 2 2009.crt
                 - c47d9980.0 -> Chambers_of_Commerce_Root_-_2008.crt
               - c5d3212a.0 -> PSCProcert.crt
               - c5e082db.0 -> UTN USERFirst Email Root CA.crt
               -- c679bc3f.0 ->
TÜRKTRUST_Elektronik_Sertifika_Hizmet_Sağlayıcısı_H6.crt
               - c99398f3.0 -> RSA Security 2048 v3.crt
               - c9f83a1c.0 -> Comodo Secure Services root.crt
               ca6e4ad9.0 -> ePKI_Root_Certification_Authority.crt
               - ca-certificates.crt
               — CA Disig_Root_R1.crt
               — CA_Disig_Root_R2.crt
               — Camerfirma_Chambers_of_Commerce_Root.crt
               Camerfirma_Global_Chambersign_Root.crt
               - CA WoSign ECC Root.crt
               -- cb357862.0 ->
Verisign_Class_2_Public_Primary_Certification_Authority_-_G2.crt
               - cb59f961.0 -> Camerfirma_Global_Chambersign_Root.crt
                 - cbeee9e2.0 -> GeoTrust Global CA 2.crt
               - cbf06781.0 -> Go Daddy Root Certificate Authority - G2.crt
               -- cc450945.0 -> Izenpe.com.crt
                 — cd58d51e.0 -> Security Communication RootCA2.crt
               Certification_Authority_of_WoSign_G2.crt
               - Certigna.crt
               — Certinomis_-_Autorité_Racine.crt
               - Certinomis - Root CA.crt
               - Certplus Class 2 Primary CA.crt
               Certplus_Root_CA_G1.crt
               Certplus_Root_CA_G2.crt
               certSIGN_ROOT_CA.crt
               - Certum Root CA.crt
               - Certum Trusted Network CA 2.crt
               Certum_Trusted_Network_CA.crt
               - cfa1c2ee.0 -> Buypass Class 2 CA 1.crt
               CFCA EV ROOT.crt
               - Chambers_of_Commerce_Root_-_2008.crt
               China Internet Network Information Center EV Certificates Root.crt
               CNNIC ROOT.crt
               Comodo_AAA_Services_root.crt
               COMODO_Certification_Authority.crt
               COMODO_ECC_Certification_Authority.crt
```

```
- COMODO RSA Certification Authority.crt
                 - Comodo_Secure_Services_root.crt
                 - Comodo Trusted Services root.crt
                 - ComSign CA.crt
               Cybertrust_Global_Root.crt
               - d4dae3dd.0 -> D-TRUST Root Class 3 CA 2 EV 2009.crt
               d6325660.0 -> COMODO_RSA_Certification_Authority.crt
               — d7e8dc79.0 -> QuoVadis Root CA 2.crt
               - d853d49e.0 -> Trustis FPS Root CA.crt
               — d957f522.0 -> Certinomis_-_Autorité_Racine.crt
               -- dc45b0bd.0 ->
Verisign_Class_2_Public_Primary_Certification_Authority_-_G3.crt
               dd8e9d41.0 -> DigiCert_Global_Root_G3.crt
               Deutsche_Telekom_Root_CA_2.crt
               DigiCert Assured ID Root CA.crt
               - DigiCert Assured ID Root G2.crt
               DigiCert_Assured_ID_Root_G3.crt
               DigiCert_Global_Root_CA.crt
               - DigiCert Global Root G2.crt
               - DigiCert Global Root G3.crt
               DigiCert_High_Assurance_EV_Root_CA.crt
               DigiCert_Trusted_Root_G4.crt
               - DST ACES_CA_X6.crt
               DST Root CA X3.crt
               - D-TRUST_Root_Class_3_CA_2_2009.crt
               - D-TRUST_Root_Class_3_CA_2_EV_2009.crt
               e113c810.0 -> Certigna.crt
               - e18bfb83.0 -> QuoVadis_Root_CA_3_G3.crt
               e2799e36.0 -> GeoTrust_Primary_Certification_Authority_-_G3.crt
               e36a6752.0 -> Atos_TrustedRoot_2011.crt
               - e536d871.0 -> AddTrust_Qualified_Certificates_Root.crt
               -> e73d606e.0 -> OISTE_WISeKey_Global_Root_GB_CA.crt
               - e8de2f56.0 -> Buypass_Class_3_Root_CA.crt
               EBG Elektronik Sertifika Hizmet Sağlayıcısı.crt
               EC-ACC.crt
               ee1365c0.0 ->
Verisign_Class_1_Public_Primary_Certification_Authority_-_G3.crt
               - ee64a828.0 -> Comodo_AAA_Services_root.crt
               - EE Certification Centre Root CA.crt
               - eed8c118.0 -> COMODO ECC Certification Authority.crt
               - ef2f636c.0 -> Equifax_Secure_Global_eBusiness_CA.crt
               - ef954a4e.0 -> IdenTrust Commercial Root CA 1.crt
               Entrust.net_Premium_2048_Secure_Server_CA.crt
               - Entrust_Root_Certification_Authority.crt
               Entrust_Root_Certification_Authority_-_EC1.crt
               Entrust_Root_Certification_Authority_-_G2.crt
               - ePKI_Root_Certification_Authority.crt
               - Equifax_Secure_CA.crt
               - Equifax_Secure_eBusiness_CA_1.crt
```

```
- Equifax Secure Global eBusiness CA.crt
 — E-Tugra_Certification_Authority.crt
f060240e.0 -> Certplus Class 2 Primary CA.crt
 - f081611a.0 -> Go_Daddy_Class_2_CA.crt
f30dd6ad.0 -> USERTrust_ECC_Certification_Authority.crt
f3377b1b.0 -> Security Communication Root CA.crt
f387163d.0 -> Starfield_Class_2_CA.crt
f38a011e.0 -> Certification Authority of WoSign G2.crt
- f39fc864.0 -> SecureTrust CA.crt
f90208f7.0 -> Camerfirma_Chambers_of_Commerce_Root.crt
fc5a8f99.0 -> USERTrust RSA Certification Authority.crt
fcac10e3.0 -> Juur-SK.crt
fe8a2cd8.0 -> SZAFIR_ROOT_CA2.crt
GeoTrust_Global_CA_2.crt
- GeoTrust_Global_CA.crt
- GeoTrust Primary Certification Authority.crt
- GeoTrust_Primary_Certification_Authority_-_G2.crt
- GeoTrust_Primary_Certification_Authority_-_G3.crt
- GeoTrust Universal CA 2.crt
GeoTrust_Universal_CA.crt
Global_Chambersign_Root_-_2008.crt
├─ GlobalSign_ECC_Root_CA_-_R4.crt
— GlobalSign_ECC_Root_CA_-_R5.crt
- GlobalSign Root CA.crt
├─ GlobalSign_Root_CA_-_R2.crt
GlobalSign_Root_CA_-_R3.crt
Go Daddy Class 2 CA.crt
├─ Go Daddy Root Certificate Authority - G2.crt
Hellenic_Academic_and_Research_Institutions_ECC_RootCA_2015.crt
Hellenic_Academic_and_Research_Institutions_RootCA_2011.crt
Hellenic_Academic_and_Research_Institutions_RootCA_2015.crt
- Hongkong_Post_Root_CA_1.crt
IdenTrust_Commercial_Root_CA_1.crt
- IdenTrust Public Sector Root CA 1.crt
─ IGC A.crt
ISRG_Root_X1.crt
- Izenpe.com.crt
- Juur-SK.crt
- Microsec e-Szigno Root CA 2009.crt
Microsec_e-Szigno_Root CA.crt
├─ NetLock_Arany_=Class_Gold=_Főtanúsítvány.crt
- Network Solutions Certificate Authority.crt
- OISTE_WISeKey_Global_Root_GA_CA.crt
- OISTE_WISeKey_Global_Root_GB_CA.crt
- OpenTrust_Root_CA_G1.crt
- OpenTrust_Root_CA_G2.crt
- OpenTrust_Root_CA_G3.crt
- PSCProcert.crt
QuoVadis_Root_CA_1_G3.crt
```

```
- QuoVadis Root CA 2.crt
 — QuoVadis_Root_CA_2_G3.crt

    QuoVadis Root CA 3.crt

 - QuoVadis Root CA 3 G3.crt
QuoVadis_Root_CA.crt
- Root CA Generalitat Valenciana.crt
RSA_Security_2048_v3.crt
- Secure Global CA.crt
- SecureSign RootCAll.crt
SecureTrust_CA.crt
- Security Communication EV RootCA1.crt
— Security_Communication_RootCA2.crt
Security_Communication_Root_CA.crt
— Sonera_Class_2_Root_CA.crt
- Staat der Nederlanden EV Root CA.crt
- Staat der Nederlanden Root CA - G2.crt
Staat_der_Nederlanden_Root_CA_-_G3.crt
Starfield_Class_2_CA.crt
- Starfield Root Certificate Authority - G2.crt
Starfield_Services_Root_Certificate_Authority_-_G2.crt
StartCom_Certification_Authority 2.crt
StartCom_Certification_Authority.crt
- StartCom Certification Authority G2.crt
- S-TRUST Authentication and Encryption Root CA 2005 PN.crt
- S-TRUST_Universal_Root_CA.crt
Swisscom_Root_CA_1.crt
- Swisscom Root CA 2.crt
- Swisscom Root EV CA 2.crt
— SwissSign_Gold_CA_-_G2.crt
SwissSign_Platinum_CA_-_G2.crt
SwissSign_Silver_CA_-_G2.crt
SZAFIR ROOT CA2.crt
- Taiwan_GRCA.crt
TC TrustCenter Class 3 CA II.crt
- TeliaSonera Root CA v1.crt
thawte_Primary_Root_CA.crt
thawte_Primary_Root_CA_-_G2.crt
thawte_Primary_Root_CA_-_G3.crt
- Trustis FPS Root CA.crt
T-TeleSec GlobalRoot Class 2.crt
T-TeleSec_GlobalRoot_Class_3.crt
├─ TÜBİTAK UEKAE_KÖk_Sertifika_Hizmet_Sağlayıcısı_-_Sürüm_3.crt
TURKTRUST Certificate Services Provider Root 2007.crt
TÜRKTRUST Elektronik Sertifika Hizmet Sağlayıcısı H5.crt
TÜRKTRUST_Elektronik_Sertifika_Hizmet_Sağlayıcısı H6.crt
TWCA_Global_Root_CA.crt
TWCA_Root_Certification_Authority.crt
USERTrust_ECC_Certification_Authority.crt
USERTrust_RSA_Certification_Authority.crt
```

```
— UTN USERFirst Email Root CA.crt
         — UTN_USERFirst_Hardware_Root_CA.crt
         — Verisign_Class_1_Public_Primary_Certification_Authority.crt
         - Verisign Class 1 Public Primary Certification Authority - G3.crt
        Verisign_Class_2_Public_Primary_Certification_Authority_-_G2.crt
       - Verisign Class 2 Public Primary Certification Authority - G3.crt
       - Verisign_Class_3_Public_Primary_Certification_Authority.crt
        - Verisign Class 3 Public Primary Certification Authority - G3.crt
       ├── VeriSign_Class_3_Public_Primary_Certification_Authority_-_G4.crt
        ├─ VeriSign_Class_3_Public_Primary_Certification_Authority_-_G5.crt
        - VeriSign Universal Root Certification Authority.crt
       ─ Visa eCommerce Root.crt
        ├─ WellsSecure_Public_Root_Certificate_Authority.crt
        - WoSign_China.crt
        - WoSign.crt
       XRamp Global CA Root.crt
     openssl.cnf
   └─ private
 — sysctl.conf
 — sysctl.d
   local.conf
 — sysupgrade.conf
 - tsmb.conf
 — TZ -> /tmp/TZ
 — uci-defaults
   - 10-fstab
     — 10 migrate-shadow
   ├─ 11_migrate-sysctl
    - 12 network-generate-ula
   - 13_fix_group_user
    - 20_migrate-feeds
    — 99-firewall
   — 99-miniupnpd
    - ddns
    — ddns cloudflare
    - ddns_cloudflare.com-v4
    - ddns_godaddy.com-v1
    - ddns_no-ip_com
     — ddns nsupdate
   └─ odhcpd.defaults
 — vsftpd
- vsftpd.conf
 — wapp_ap.conf
 — wapp_ap_ra0.conf
- wapp_ap_ra0_default.conf
- wapp_ap_ral.conf
- wapp_ap_rai0.conf
- wapp_ap_rai0_default.conf
- wapp_ap_rail.conf
```

```
wapp ap rax0.conf
 — wapp_ap_rax0_default.conf
 — wapp_ap_rax1.conf
 — wapp_ap_wlan0.conf
- wapp_ap_wlan0_default.conf
 — wapp_ap_wlan1.conf
- WfaEndpoint
   └─ wfa_cli.txt
├─ wifi-abgn-logo 270x73.png
├─ WiFi-alliancelogo_3D_default.png
- WiFi-alliancelogo_3D.png
 — wireless
   - llprofile.dat
   - mediatek
       — мрт
           — 7622_BF_CE.dat
           - 7622_BF_CN.dat
           - 7622_BF_FCC.dat
           - 7622_BF_IC.dat
           - 7622_BF_JP.dat
           - 7622_BF_MA.dat
           - 7622_BF_PH.dat
           ─ 7622 BF SI.dat
           - 7622_BF_TH.dat
           - 7622_CE.dat
           - 7622_CN.dat
           - 7622_FCC.dat
           - 7622 IC.dat
           - 7622_JP.dat
           - 7622_MA.dat
           - 7622_PH.dat
           - 7622_SI.dat
           └─ 7622_TH.dat
         - mt7615e.eeprom.bin
       - mt7615e-sku-bf.dat
       mt7615e-sku.dat
       mt7622.1.dat
       ___ mt7915.1.dat
       ___ mt7915.2.dat
       ___ mt7915.slt.b0.dat
       ___ mt7915.slt.b1.dat
       - version
       - wifi_cert.1.dat
       └─ wifi cert.2.dat
   └─ sigma_test
       - wifi_cert.1.dat
       - wifi_cert.2.dat
       - wifi_cert_b0.dat
       └─ wifi_cert_b1.dat
```

```
L x12tpd
     - x12tpd.conf
     └─ xl2tp-secrets
- lib
  - config
     └─ uci.sh
   — firmware
   — functions
     - leds.sh
     - network.sh
     - preinit.sh
     - procd.sh
     - service.sh
     - system.sh
     uci-defaults.sh
  - functions.sh
   — ld-2.24.so
  ld-linux-aarch64.so.1 -> ld-2.24.so
  libanl-2.24.so
  libanl.so.1 -> libanl-2.24.so
  libblkid-tiny.so
  — libblobmsg_json.so
 libc-2.24.so
  libcidn-2.24.so
  libcidn.so.1 -> libcidn-2.24.so
  libcrypt-2.24.so
  libcrypt.so.1 -> libcrypt-2.24.so
 libc.so.6 -> libc-2.24.so
  ├─ libdl-2.24.so
  libdl.so.2 -> libdl-2.24.so
  libfstools.so
  libgcc_s.so.1
 libjson_script.so
  - libkvcutil.so
  libm-2.24.so
 libm.so.6 -> libm-2.24.so
  ├ libnsl-2.24.so
  libnsl.so.1 -> libnsl-2.24.so
  libnss dns-2.24.so
  libnss_dns.so.2 -> libnss_dns-2.24.so
  libnss_files-2.24.so
 libnss files.so.2 -> libnss files-2.24.so
 libpthread-2.24.so
  libpthread.so.0 -> libpthread-2.24.so
 libresolv-2.24.so
 libresolv.so.2 -> libresolv-2.24.so
  - librpc.so
  librt-2.24.so
 librt.so.1 -> librt-2.24.so
```

```
— libsetlbf.so
 — libssp.so.0 -> libssp.so.0.0.0
 — libssp.so.0.0.0
 - libthread_db.so.1 -> libthread_db-1.0.so
- libubox.so
 — libubus.so
- libuci.so
libutil-2.24.so
libutil.so.1 -> libutil-2.24.so
 — libvalidate.so
- mediatek.sh
 - modules
   └─ 4.4.198
       - act_connmark.ko
       - act_mirred.ko
       - act_skbedit.ko
       - ahci_mtk.ko
       - arc4.ko
       - authenc.ko
       - cls_flow.ko
       - cls_fw.ko
       - cls_route.ko
       - cls tcindex.ko
       - cls_u32.ko
       crc-ccitt.ko
       - cryptodev.ko
       -- ebt_802_3.ko
       - ebtable_broute.ko
       — ebtable_filter.ko
       — ebtable_nat.ko
       - ebtables.ko
       - ebt_among.ko
       - ebt_arp.ko
       — ebt_arpreply.ko
       - ebt dnat.ko
       - ebt_ip.ko
       - ebt_limit.ko
       - ebt_mark.ko
       - ebt_mark_m.ko
       - ebt_pkttype.ko
       - ebt_redirect.ko
       - ebt snat.ko
       - ebt_stp.ko
       - ebt_vlan.ko
       - ecb.ko
       - ehci-hcd.ko
       - ehci-platform.ko
       --- em_u32.ko
       gpio-button-hotplug.ko
```

gre.ko
ifb.ko
ip6table_filter.ko
ip6table_mangle.ko
ip6t_REJECT.ko
ip6_udp_tunnel.ko
ip_gre.ko
iptable_filter.ko
iptable_mangle.ko
iptable_nat.ko
ip_tables.ko
ipt_ECN.ko
ipt_MASQUERADE.ko
ipt_REJECT.ko
12tp_core.ko
12tp_netlink.ko
12tp_ppp.ko
libahci.ko
libahci_platform.ko
libata.ko
mapfilter.ko
mmc_block.ko
mmc_core.ko
mt7622_mt_wifi.ko
mtfwd.ko
mtkhnat.ko
mtk-sd.ko
mt_whnat.ko
mt_wifi.ko
nf_conntrack_amanda.ko
nf_conntrack_broadcast.ko
nf_conntrack_h323.ko
nf_conntrack_ipv4.ko
nf_conntrack_ipv6.ko
nf_conntrack_irc.ko
nf conntrack netlink.ko
nf_conntrack_pptp.ko
nf_conntrack_proto_gre.ko
nf_conntrack_sip.ko
nf_conntrack_snmp.ko
nf_conntrack_tftp.ko
nf_defrag_ipv4.ko
nf_defrag_ipv6.ko
nf_log_common.ko
nf_log_ipv4.ko
nf_log_ipv6.ko
nf_nat_amanda.ko
nf_nat_ftp.ko
nf_nat_h323.ko
111_1146_11323.10

	— nf_nat_ipv4.ko
	- nf_nat_irc.ko
	— nf_nat.ko
	- nf_nat_masquerade_ipv4.ko
	mf_nat_pptp.ko
	nf_nat_proto_gre.ko
	- nf_nat_redirect.ko
	- nf_nat_sip.ko
	- nf_nat_snmp_basic.ko
	- nf_nat_tftp.ko
	— nfnetlink.ko
	- nfnetlink_queue.ko
l i i	nf_reject_ipv4.ko
l i i	mf_reject_ipv6.ko
l i i	— ohci-hcd.ko
l i i	— ohci-platform.ko
	— ppp_async.ko
l i i	— ppp_generic.ko
	ppp_mppe.ko
	pppoe.ko
	pppoc.ko pppox.ko
	pptp.ko
	— sch_hfsc.ko
	— sch_htb.ko
	- sch_ingress.ko
	- sch_tbf.ko
	— sdhci.ko
	— sdhci-pltfm.ko
	- shal_generic.ko
	- slhc.ko
	- thfsplus.ko
	— tntfs.ko
	— tsmb.ko
	— tuxera-procfs.ko
	- udp_tunnel.ko
	— usb-common.ko
	— usbcore.ko
	- usb-storage.ko
	— xhci-hcd.ko
	— xhci-mtk.ko
	— xhci-pci.ko
	— xhci-plat-hcd.ko
	- xt_CLASSIFY.ko
	- xt_comment.ko
	- xt_connbytes.ko
	xt_connlimit.ko
i i	xt_connmark.ko
i i	- xt_conntrack.ko
i i	- xt_dscp.ko
,	

```
- xt DSCP.ko
       — xt_ecn.ko
       — xt_helper.ko
      — xt hl.ko
      — xt_HL.ko
     ___ xt_length.ko
     - xt_limit.ko
     - xt LOG.ko
     - xt_mark.ko
     - xt_nat.ko
     ___ xt_NFQUEUE.ko
     - xt_recent.ko
     - xt_REDIRECT.ko
     ___ xt_state.ko
     - xt_statistic.ko
     - xt tcpmss.ko
     __ xt_time.ko
- netifd
 - dhcp.script
 — dhcpv6.script
 - hostapd.sh
 - netifd-proto.sh
 - netifd-wireless.sh
 ppp6-up
  ppp-down
 ppp-up
   — proto
     - 6rd.sh
     - dhcp.sh
     — dhcpv6.sh
     ___ 12tp.sh
     L ppp.sh
 L utils.sh
- network
 - config.sh
 __ switch.sh
- preinit
 - 00_preinit.conf
 — 02 default set state
 - 03_preinit_do_mediatek.sh
 — 10_indicate_failsafe
 ├─ 10 indicate preinit
 — 10_sysinfo
 — 30_failsafe_wait
 — 40_run_failsafe_hook
 - 50_indicate_regular_preinit
 - 70_initramfs_test
 - 80_mount_root
 - 81_urandom_seed
```

```
— 98 10 mtk failsafe init
       — 99_10_failsafe_login
       └─ 99_10_run_init
     - upgrade
       - common.sh
       - fwtool.sh
       - keep.d
          - base-files
          base-files-essential
           — dbus
          - opkg
          — ppp
          └─ vsftpd
       - luci-add-conffiles.sh
       - nand.sh
      __ platform.sh
    — wifi
       - mt7615e.lua
       - ralink common.sh
       └─ wifi_services.lua
-- lib64 -> lib
- mnt
— overlay
- proc
- rom
  L note
 — root
— sbin
   arp_neigh_loop
   - askfirst
   - block
   config_router_refresh.sh
   — dat2gui.sh
   - defaultconfig
   devinfo2dat.sh
   - devstatus
   - dnsd
   - firewall.sh
   - firstboot
   ├─ fw3
   - fwcron
   - fwupgrade
   — get_arabic_css.sh
   - getdevinfo.sh
   - getipconfig.sh
   - getpid.sh
   — getpstats.sh
   get_version.sh
   gpstats.sh
```

```
gui2wifidat.sh
 guiwifi2dat.sh
 — guiwifibeam2dat.sh
 — guiwifibridge2dat.sh
guiwififilter2dat.sh
guiwifiguest2dat.sh
guiwifiQoS2dat.sh
guiwifisecurity2dat.sh
guiwifiwps2dat.sh
- halt -> ../bin/busybox
hotplug-call
- hwclock -> ../bin/busybox
ifconfig -> ../bin/busybox
ifdown -> ifup
- ifstatus
- ifup
- init
ip -> ../bin/busybox
jffs2mark -> jffs2reset
- jffs2reset
- kmodloader
- led.sh
logd
- logread
- macaddr.sh
- mgmt_cron.sh
mkswap -> ../bin/busybox
— mount root
├─ mtd
- mtk_factory_rw.sh
- mtkhnat
- mtkwifi.sh
- netbios
- netifd
- pack incoming log.sh
pack_outgoing_log.sh
pack_security_log.sh
pivot_root -> ../bin/busybox
poweroff -> ../bin/busybox
- procd
— qos_setting.sh
reboot -> ../bin/busybox
- reload config
- route -> ../bin/busybox
- rpcd
service_adv_route.sh
service_firewall_DMZ.sh
 service_firewall_ipv6.sh
 service_firewall_mgmt.sh
```

```
    service firewall portforwarding.sh

service_firewall_porttriggering.sh
service_firewall_singleport.sh
 service_firewall_spi.sh
service_guest_lan.sh
- service init.sh
service_lan_restart.sh
- service parental ctrl.sh
- service quagga.sh
 service_sip_alg.sh
- service tsmb.sh
- service_upnp.sh
service_vpn_passthrough.sh
— service_vsftpd.sh
service_wifi_bridge.sh
- sigma
- smp.sh
- start-stop-daemon -> ../bin/busybox
- stoping.sh
storage_mount.sh
- swconfig
switch_root -> ../bin/busybox
sysctl -> ../bin/busybox
- sysupgrade
- traffic_log_init.sh
- transmit_region.sh
— trigger_ctrl
├─ trigger srv
- ubusd
— uci
- udevtrigger
- udhcpc -> ../bin/busybox
update_lan_ip_of_rules.sh
- updatepid.sh
- upgraded
- urandom_seed
- url.txt
— validate_data
vconfig -> ../bin/busybox
- vlan_trigger.sh
- wan_guard
- wanled
- wfa ca
- wfa_dut
- wfaping6.sh
- wfaping.sh
- wfa_test_cli.sh
- wifi
- wifi.legacy
```

```
- wireless client maintain
   — wizard_block_traffic.sh
   - wps_mon
   — wtbd
   — zcip -> ../bin/busybox
 __ zcip.script
- sys
- tmp
- usr
   — bin
     __ [ -> ../../bin/busybox
     __ [[ -> ../../bin/busybox
     - 1905ctrl
     ─ 8021xd
     — at
     — ated
       — atq -> at
     -- atrm -> at
       — avahi-browse
       — avahi-browse-domains
     - avahi-publish
     - avahi-publish-address
     - avahi-publish-service
      — avahi-resolve
     - avahi-resolve-address
     - avahi-resolve-host-name
       — avahi-set-host-name
     - awk -> ../../bin/busybox
     basename -> ../../bin/busybox
     - bndstrg2
     bunzip2 -> ../../bin/busybox
     bzcat -> ../../bin/busybox
     — chage
     clear -> ../../bin/busybox
     cmp -> ../../bin/busybox
     crontab -> ../../bin/busybox
     - curl
     cut -> ../../bin/busybox
       — datconf
       - dbus-launch
       — dbus-launch.real
     — dbus-uuidgen
     dirname -> ../../bin/busybox
     — du -> ../../bin/busybox
     env -> ../../bin/busybox
     expr -> ../../bin/busybox
       — find -> ../../bin/busybox
     free -> ../../bin/busybox
     - fwdd
```

```
fwtool

    gdbserver

 getrandom
 - head -> ../../bin/busybox
 — hexdump -> ../../bin/busybox
id -> ../../bin/busybox
- iperf
- iperf3
- iwinfo
 — jshn
- jsonfilter
 — killall -> ../../bin/busybox
 — kvcedit
less -> ../../bin/busybox
logger -> ../../bin/busybox
|--- lspci -> ../../bin/busybox
 — lsusb -> ../../bin/busybox
— lua
- mbo nr.sh
├─ md5sum -> ../../bin/busybox
- mii_mgr
mii_mgr_cl45
├── mkfifo -> ../../bin/busybox
- mtdc_test
- natpmpc
mc -> ../../bin/busybox
- nmap
mohup -> ../../bin/busybox
mslookup -> ../../bin/busybox
- nsupdate
- nvram_get
nvram_set -> /usr/bin/nvram_get
- openssl
p1905 managerd
passwd -> ../../bin/busybox
pgrep -> ../../bin/busybox
printf -> ../../bin/busybox
— qdma
readlink -> ../../bin/busybox
 - regs
- relayer
reset -> ../../bin/busybox
- resolveip
- sd_rw_test.sh
├── seq -> ../../bin/busybox
-> sha256sum -> ../../bin/busybox
— signify -> usign
- sort -> ../../bin/busybox
- strings -> ../../bin/busybox
```

```
- switch
   - tail -> ../../bin/busybox
  - tee -> ../../bin/busybox
   - test -> ../../bin/busybox
 tftp -> ../../bin/busybox
 time -> ../../bin/busybox
 top -> ../../bin/busybox
 tp ts switch.sh
 tr -> ../../bin/busybox
  - traceroute -> ../../bin/busybox
 traceroute6 -> ../../bin/busybox
 uniq -> ../../bin/busybox
 - uptime -> ../../bin/busybox
 - usign
 - uuidgen
 - wapp
  — wappctrl
 - wapp_openwrt.sh
 — wc -> ../../bin/busybox
 --- wget -> wget-ssl
 - wget-ssl
 - which -> ../../bin/busybox
 - wificonf
 - wifi config save
 xargs -> ../../bin/busybox

    yes → ../../bin/busybox

- lib
 - dbus-1
     └─ dbus-daemon-launch-helper
   - ddns
     dynamic_dns_functions.sh
     dynamic_dns_lucihelper.sh
     dynamic_dns_updater.sh
     - update cloudflare com v1.sh
     - update cloudflare com v4.sh
     update_dyndns_org.sh
     - update_godaddy_com_v1.sh
      - update_no-ip_com.sh
     __ update_nsupdate.sh
   ebtables
     libebt_802_3.so
     - libebtable broute.so
     - libebtable filter.so
     - libebtable nat.so
     libebt_among.so
     libebt_arpreply.so
     libebt arp.so
     libebt_ip6.so
     - libebt_ip.so
```

```
- libebt limit.so
     - libebt_log.so
     — libebt mark m.so
     libebt mark.so
   libebt_nat.so
   libebt nflog.so
   libebt_pkttype.so
   - libebt redirect.so
   libebt standard.so
   libebt_stp.so
     libebt ulog.so
   libebt_vlan.so
 iptables
   libip6t_hl.so
   libip6t HL.so
   - libipt_ECN.so
   libipt_ttl.so
   libipt_TTL.so
   libxt CLASSIFY.so
   libxt_connbytes.so
   libxt_connlimit.so
   libxt_connmark.so
   libxt CONNMARK.so
   libxt dscp.so
   libxt_DSCP.so
   libxt_ecn.so
   libxt_helper.so
   libxt length.so
   libxt_NFQUEUE.so
   libxt_recent.so
   - libxt_statistic.so
   libxt_tcpmss.so
    — libxt_tos.so
   L libxt_TOS.so
libavahi-client.so.3 -> libavahi-client.so.3.2.9
libavahi-client.so.3.2.9
libavahi-common.so.3 -> libavahi-common.so.3.5.3
 - libavahi-common.so.3.5.3
libavahi-core.so.7 -> libavahi-core.so.7.0.2
libavahi-core.so.7.0.2
libbind9.so -> libbind9.so.140.0.11
- libbind9.so.140 -> libbind9.so.140.0.11
— libbind9.so.140.0.11
 - libblkid.so -> libblkid.so.1
libblkid.so.1 -> libblkid.so.1.1.0
─ libblkid.so.1.1.0
 — libbtdrv.so
- libcjson.so
libcrypto.so.1.0.0
```

```
— libcurl.so.4 -> libcurl.so.4.5.0
 - libcurl.so.4.5.0
 - libdaemon.so.0 -> libdaemon.so.0.5.0
 - libdaemon.so.0.5.0
 — libdbus-1.so.3 -> libdbus-1.so.3.14.5
 - libdbus-1.so.3.14.5
 - libdns.so -> libdns.so.165.0.4
- libdns.so.165 -> libdns.so.165.0.4
libdns.so.165.0.4
 - libebtc.so
— libelf.so
 — libelf.so.1 -> libelf.so
libeth_1905ops.so
libexpat.so.1 -> libexpat.so.1.6.2
libexpat.so.1.6.2
libgdbm.so.4 -> libgdbm.so.4.0.0
 — libgdbm.so.4.0.0
libip4tc.so -> libip4tc.so.0.1.0
libip4tc.so.0 -> libip4tc.so.0.1.0
libip4tc.so.0.1.0
libip6tc.so -> libip6tc.so.0.1.0
libip6tc.so.0 -> libip6tc.so.0.1.0
— libip6tc.so.0.1.0
- libiptext4.so
libiptext6.so
- libiptext.so
 - libirs.so -> libirs.so.141.0.4
- libirs.so.141 -> libirs.so.141.0.4
 - libirs.so.141.0.4
 - libisccc.so -> libisccc.so.140.0.4
libisccc.so.140 -> libisccc.so.140.0.4
libisccc.so.140.0.4
libisccfg.so -> libisccfg.so.140.3.1
 - libisccfg.so.140 -> libisccfg.so.140.3.1
libisccfg.so.140.3.1
libisc.so -> libisc.so.160.1.2
 - libisc.so.160 -> libisc.so.160.1.2
 - libisc.so.160.1.2
 — libiwinfo.so
libjson-c.so.2 -> libjson-c.so.2.0.2
 — libjson-c.so.2.0.2
liblua.so.5.1.5
 — liblwres.so -> liblwres.so.141.0.3
 - liblwres.so.141 -> liblwres.so.141.0.3
— liblwres.so.141.0.3
libmbedcrypto.so -> libmbedcrypto.so.1
 — libmbedcrypto.so.1 -> libmbedcrypto.so.2.7.0
 — libmbedcrypto.so.2.7.0
libmbedtls.so -> libmbedtls.so.10
```

```
- libmbedtls.so.10 -> libmbedtls.so.2.7.0
 - libmbedtls.so.2.7.0
 - libmbedx509.so -> libmbedx509.so.0
  - libmbedx509.so.0 -> libmbedx509.so.2.7.0
 - libmbedx509.so.2.7.0
 — libmnl.so.0 -> libmnl.so.0.2.0
 - libmnl.so.0.2.0
- libmtd.so
- libnatpmp.so.1
 - libnetfilter_conntrack.so.3 -> libnetfilter_conntrack.so.3.6.0
libnetfilter conntrack.so.3.6.0
libnetfilter_cthelper.so.0 -> libnetfilter_cthelper.so.0.0.0
libnetfilter_cthelper.so.0.0.0
libnetfilter_cttimeout.so.1 -> libnetfilter_cttimeout.so.1.0.0
libnetfilter cttimeout.so.1.0.0
libnetfilter queue.so.1 -> libnetfilter queue.so.1.3.0
 - libnetfilter_queue.so.1.3.0
libnfnetlink.so.0 -> libnfnetlink.so.0.2.0
libnfnetlink.so.0.2.0
 - libnl-3.so -> libnl-3.so.200.24.0
- libnl-3.so.200 -> libnl-3.so.200.24.0
libnl-3.so.200.24.0
 - libnl-genl-3.so -> libnl-genl-3.so.200.24.0
 - libnl-genl-3.so.200 -> libnl-genl-3.so.200.24.0
libnl-genl-3.so.200.24.0
libnl-genl.so -> libnl-genl-3.so.200.24.0
  - libnl-nf-3.so -> libnl-nf-3.so.200.24.0
├─ libnl-nf-3.so.200 -> libnl-nf-3.so.200.24.0
 - libnl-nf-3.so.200.24.0
 - libnl-nf.so -> libnl-nf-3.so.200.24.0
libnl-route-3.so -> libnl-route-3.so.200.24.0
— libnl-route-3.so.200.24.0
 - libnl-route.so -> libnl-route-3.so.200.24.0
libnl.so -> libnl-3.so.200.24.0
libnl-tiny.so
libpcap.so -> libpcap.so.1
- libpcap.so.1
libpcreposix.so.0 -> libpcreposix.so.0.0.5
libpcreposix.so.0.0.5
 — libpcre.so -> libpcre.so.1.2.9
libpcre.so.1 -> libpcre.so.1.2.9
libpcre.so.1.2.9
 — libpopt.so.0 -> libpopt.so.0.0.0
libpopt.so.0.0.0
— libssl.so.1.0.0
 - libstdc++.so.6 -> libstdc++.so.6.0.21
 - libstdc++.so.6.0.21
libstdc++.so.6.0.21-gdb.py
```

```
- libuclient.so
libuuid.so -> libuuid.so.1
 - libuuid.so.1 -> libuuid.so.1.3.0
libuuid.so.1.3.0
libxtables.so -> libxtables.so.12.0.0
libxtables.so.12 -> libxtables.so.12.0.0
libxtables.so.12.0.0
libzebra.so.1 -> libzebra.so.1.0.0
libzebra.so.1.0.0
 — libz.so -> libz.so.1.2.11
libz.so.1 -> libz.so.1.2.11
 - libz.so.1.2.11
- lighttpd
   - mod_accesslog.so
   — mod access.so
   — mod alias.so
   - mod_auth.so
   - mod_cgi.so
   - mod_compress.so
   — mod_dirlisting.so
   - mod_fastcgi.so
   mod_indexfile.so
   - mod redirect.so
   - mod_scgi.so
   - mod_setenv.so
   - mod_ssi.so
     - mod staticfile.so
   └─ mod_status.so
 — lua
   — datconf.so
   - iwinfo.so
   - ltn12.lua
    — luci
       — controller
          firewall.lua
       — ip.so
       - jsonc.so
       - model
          L cbi
              └─ firewall
                  — custom.lua
                  - forward-details.lua
                   — forwards.lua
                   — rule-details.lua
                  - rules.lua
                  - zone-details.lua
                  L zones.lua
         - tools
          firewall.lua
```

```
└─ view
         └─ firewall
             - cbi addforward.htm
             - cbi_addrule.htm
            __ cbi_addsnat.htm
   — mime
     __ core.so -> ../mime.so.1.0.3
   — mime.lua
   - mime.so.1.0.3
   - nixio
     fs.lua
     └─ util.lua
   mixio.so
   - shuci.lua
   - socket
     — ftp.lua
     - headers.lua
     - http.lua
     - smtp.lua
     - tp.lua
      — unix.so
     └─ url.lua
   - socket.lua
   — socket.so.3.0-rc1
   - ubus.so
   - uci.so
 └─ uuid.lua
- opkg
  — info
     - 1905daemon.control
     - 1905daemon.list
     - 6rd.control
     - 6rd.list
     - 8021xd.control
     - 8021xd.list
     - air_monitor.control
     — air_monitor.list
      — at.control
     - ated_ext.control
     - ated_ext.list
     — at.list
     - avahi-daemon-service-http.conffiles
     - avahi-daemon-service-http.control
     - avahi-daemon-service-http.list
     - avahi-daemon-service-ssh.conffiles
     - avahi-daemon-service-ssh.control
     - avahi-daemon-service-ssh.list
     - avahi-dbus-daemon.conffiles
```

avahi-dbus-daemon.control
avahi-dbus-daemon.list
avahi-utils.control
avahi-utils.list
base-files.conffiles
base-files.control
base-files.list
- bind-client.control
bind-client.list
bind-libs.control
— bind-libs.list
blkid.control
blkid.list
block-mount.control
block-mount.list
bndstrg_plus.control
bndstrg_plus.list
busybox.control
busybox.list
ca-bundle.control
ca-bundle.list
ca-certificates.control
ca-certificates.list
conntrack.control
conntrack.list
curl.control
curl.list
datconf.control
datconf.list
datconf-lua.control
datconf-lua.list
dbus.control
dbus.list
ddns-scripts_cloudflare.com-v4.control
ddns-scripts_cloudflare.com-v4.list
ddns-scripts_cloudflare.com-v4.fist ddns-scripts_cloudflare.com-v4.preinst
_
ddns_scripts_cloudflare.control
ddns-scripts_cloudflare.list
ddns-scripts_cloudflare.preinst
— ddns-scripts.conffiles
— ddns-scripts.control
ddns-scripts_godaddy.com-v1.control
ddns-scripts_godaddy.com-v1.list
ddns-scripts_godaddy.com-v1.preinst
— ddns-scripts.list
ddns-scripts_no-ip_com.control
ddns-scripts_no-ip_com.list
ddns-scripts_no-ip_com.preinst
ddns-scripts_nsupdate.control

— ddns-scripts_nsupdate.list
ddns-scripts_nsupdate.preinst
<pre>ddns-scripts.preinst dnsmasq.conffiles</pre>
— dnsmasq.control
— dnsmasq.list
— ebtables.control
— ebtables.list
— ethtool.control
— ethtool.list
— firewall conffiles
— firewall.control
— firewall.list
— flash_test.control
— flash_test.list
— fstools.control
— fstools.list
— fwdd.control
— fwdd.list
— fwtool.control
— fwtool.list
— gdbserver.control
— gdbserver.list
— hostapd-common.control
— hostapd-common.list
— igmpproxy.conffiles
— igmpproxy.control
— igmpproxy.list
— ip6tables.control
— ip6tables.list
— iperf3.control
— iperf3.list
— iperf.control
— iperf.list
— iptables.control
— iptables.list
intables-mod-conntrack-extra.control
— iptables-mod-conntrack-extra.list
— iptables-mod-ipopt.control
— iptables-mod-ipopt.list
— iptables-mod-nfqueue.control
— iptables-mod-nfqueue.list
iwinfo.control
— iwinfo.list
— jshn.control
— jshn.list
— jsonfilter.control
— jsonfilter.list
- kernel.control

- kernel.list
- kmod-ata-ahci-mtk.control
- kmod-ata-ahci-mtk.list
- kmod-ata-core.control
- kmod-ata-core.list
- kmod-bridge.control
- kmod-bridge.list
<pre>— kmod-br-netfilter.control</pre>
<pre>— kmod-br-netfilter.list</pre>
- kmod-crypto-aead.control
— kmod-crypto-aead.list
- kmod-crypto-arc4.control
- kmod-crypto-arc4.list
- kmod-crypto-authenc.control
<pre>— kmod-crypto-authenc.list</pre>
- kmod-cryptodev.control
<pre>- kmod-cryptodev.list</pre>
- kmod-crypto-ecb.control
- kmod-crypto-ecb.list
- kmod-crypto-hash.control
<pre>- kmod-crypto-hash.list</pre>
<pre>- kmod-crypto-manager.control</pre>
<pre>— kmod-crypto-manager.list</pre>
- kmod-crypto-null.control
- kmod-crypto-null.list
- kmod-crypto-pcompress.control
<pre>- kmod-crypto-pcompress.list</pre>
- kmod-crypto-shal.control
- kmod-crypto-shal.list
- kmod-ebtables.control
- kmod-ebtables-ipv4.control
- kmod-ebtables-ipv4.list
- kmod-ebtables.list
- kmod-gpio-button-hotplug.control
- kmod-gpio-button-hotplug.list
- kmod-gre.control
— kmod-gre.list
- kmod-ifb.control
— kmod-ifb.list
- kmod-ip6tables.control
— kmod-ip6tables.list
- kmod-ipt-conntrack.control
- kmod-ipt-conntrack-extra.control
- kmod-ipt-conntrack-extra.list
- kmod-ipt-conntrack.list
- kmod-ipt-core.control
- kmod-ipt-core.list
- kmod-ipt-ipopt.control
— kmod-ipt-ipopt.list

kmod-ipt-nat.list
kmod-ipt-nfqueue.control
kmod-ipt-nfqueue.list
kmod-iptunnel4.control
kmod-iptunnel4.list
kmod-iptunnel.control
kmod-iptunnel.list
-
kmod-12tp.control
kmod-l2tp.list
kmod-lib-crc-ccitt.control
kmod-lib-crc-ccitt.list
kmod-lib-textsearch.control
kmod-lib-textsearch.list
kmod-llc.control
kmod-llc.list
kmod-mediatek_hnat.control
- kmod-mediatek_hnat.list
kmod-mmc.control
- kmod-mmc.list
kmod-mppe.control
kmod-mppe.list
kmod-mtfwd.control
- kmod-mtfwd.list
kmod-mt_wifi.control
kmod-mt_wifi.list
kmod-nf-conntrack6.control
kmod-nf-conntrack6.list
kmod-nf-conntrack.control
kmod-nf-conntrack.list
kmod-nf-conntrack-netlink.control
kmod-nf-conntrack-netlink.list
kmod-nf-ipt6.control
kmod-nf-ipt6.list
kmod-nf-ipt.control
kmod-nf-ipt.list
kmod-nf-nat.control
kmod-nf-nathelper.control
kmod-nf-nathelper-extra.control
kmod-nf-nathelper-extra.list
kmod-nf-nathelper.list
kmod-nf-nat.list
kmod-nfnetlink.control
kmod-nfnetlink.list
- kmod-nfnetlink-queue.control

- kmod-nfnetlink-queue.list
- kmod-nls-base.control
- kmod-nls-base.list
- kmod-ppp.control
- kmod-ppp.list
- kmod-pppoe.control
- kmod-pppoe.list
- kmod-pppol2tp.control
- kmod-pppol2tp.list
- kmod-pppox.control
- kmod-pppox.list
- kmod-pptp.control
- kmod-pptp.list
- kmod-sched-connmark.control
- kmod-sched-connmark.list
- kmod-sched-core.control
- kmod-sched-core.list
- kmod-scsi-core.control
- kmod-scsi-core.list
- kmod-scsi-cote.iist - kmod-sdhci.control
- kmod-sdhci.list
- kmod-sdhci-mtk.control
- kmod-sdhci-mtk.list
- kmod-sit.control
- kmod-sit.list
- kmod-slt.list
- kmod-slhc.list
- kmod_stp.control
- kmod-stp.list
- kmod-udptunnel4.control
- kmod-udptunnel4.list
- kmod_udptunnel6.control
- kmod-udptunnel6.list
<pre>— kmod-usb2.control  — kmod-usb2.list</pre>
- kmod-usb2.11st - kmod-usb3.control
- kmod-usb3.list
- kmod-usb3.11st - kmod-usb-core.control
- kmod-usb-core.control
- kmod-usb-ohci.control
- kmod-usb-ohci.list
- kmod_usb_storage_list
<pre>— kmod-usb-storage.list  — kvcedit.control</pre>
- kvcedit.control - kvcedit.list
— lede-keyring.control
— lede-keyring.list
— libavahi client ligt
— libavahi-client.list

	- libavahi-dbus-support.control
	libavahi-dbus-support.list
	- libblkid.control
	— libblkid.list
	libblobmsg-json.control
	- libblobmsg-json.list
	libc.control
	libc.list
	libcurl.control
	libcurl.list
	- libdaemon.control
	- libdaemon.list
	libdbus.control
	- libdbus.list
	- libelf1.control
	— libelf1.list
	- libexpat.control
	- libexpat.list
	libgcc.control
	- libgcc.list
	- libgdbm.control
	libgdbm.list
li i i i	libip4tc.control
	libip4tc.list
	libip6tc.control
	libip6tc.list
	libiwinfo.control
	libiwinfo.list
	- libiwinfo-lua.control
	libiwinfo-lua.list
	libjson-c.control
	- libjson-c.list
	- libjson-script.control
	- libjson-script.list
	libkvcutil.control
	- libkvcutil.list
	Iiblua.control
	- liblua.list
	- libmbedtls.control
	libmbedtls.list
	- libmnl.control
	libmnl.list
	libnatpmp.control
	- libnatpmp.list
	libnetfilter-conntrack.control
	- libnetfilter-conntrack.list
	- libnetfilter-cthelper.control
	libnetfilter-cthelper.list
i i i	libnetfilter-cttimeout.control

libratfiltor attimoout list
— libnetfilter_cttimeout.list
— libnetfilter queue.control
- libnetfilter-queue.list - libnfnetlink.control
— libninetlink.control — libnfnetlink.list
— libnl.control
— libnl-core.control
— libnl-core.list
— libnl-genl.control
— libnl-genl.list
- libnl.list
— libnl-nf.control
— libnl-nf.list
— libnl-route.control
— libnl-route.list
- libni-toute.list - libni-tiny.control
— libnl-tiny.list
— libonenssl.control
— libopenssl.list
— libpcap.control
— libpcap.list
- libpcre.control
— libpcre.list
— libpopt.control
— libpopt.list
— libpthread.control
— libpthread.list
— librpc.control
— librpc.list
— librt.control
— librt.list
— libssp.control
— libssp.list
- libstdcpp.control
— libstdcpp.list
- libthread-db.control
- libthread-db.list
— libubox.control
— libubox.list
— libubus.control
— libubus.list
— libubus-lua.control
— libubus-lua.list
— libuci.control
— libuci.list
— libuci-lua.control
— libuci-lua.list
— libuclient.control
— libuclient.list

libuuid.control
Ibuuid.list
libxtables.control
libxtables.list
lighttpd.conffiles
lighttpd.control
lighttpd.list
lighttpd-mod-access.control
lighttpd-mod-access.list
lighttpd-mod-accesslog.control
lighttpd-mod-accesslog.list
lighttpd-mod-alias.control
lighttpd-mod-alias.list
lighttpd-mod-auth.control
lighttpd-mod-auth.list
lighttpd-mod-cgi.control
lighttpd-mod-cgi.list
lighttpd-mod-compress.control
lighttpd-mod-compress.list
lighttpd-mod-fastcgi.control
lighttpd-mod-fastcgi.list
lighttpd-mod-redirect.control
lighttpd-mod-redirect.list
lighttpd-mod-scgi.control
lighttpd-mod-scgi.list
lighttpd-mod-setenv.control
lighttpd-mod-setenv.list
lighttpd-mod-ssi.control
lighttpd-mod-ssi.list
lighttpd-mod-status.control
lighttpd-mod-status.list
Imbench.control
Imbench.list
Imbench-lmdd.control
Imbench-lmdd.list
logd.control
logd.list
logrotate.conffiles
logrotate.control
logrotate.list
lua.control
lua.list
luasocket.control
luasocket.list
luci-app-firewall.control
luci-app-firewall.list
luci-lib-ip.control
luci-lib-ip.list
luci-lib-jsonc.control

luci-lib-jsonc.list
luci-lib-nixio.control
luci-lib-nixio.list
malloctest.control
malloctest.list
memtester.control
memtester.list
mii_mgr.control
— mii mgr.list
miniupnpd.conffiles
— miniupnpd.control
— miniupnpd.list
— mtd.control
— mtd.list
mtk-base-files.control
mtk-base-files.list
mtk_factory_rw.control
- mtk_factory_rw.list
- mtkhnat_util.control
- mtkhnat_util.list
— natpmpc.control
— natpmpc.list
— netbios.control
— netbios.list
- netifd.control
- netifd.list
- nmap.control
- nmap.list
— odhcp6c.control
— odhcp6c.list
— odhcpd.control
— odhcpd.list
— openssl-util.conffiles
— openssl-util.control
— openssl-util.list
— opkg.conffiles
— opkg.control
— opkg.list
ppp.conffiles
ppp.control
ppp.list
ppp-mod-pppoe.control
ppp-mod-pppoe.list
ppp-mod-pppol2tp.control
ppp-mod-pppol2tp.list
ppp-mod-pptp.control
ppp-mod-pptp.list
pppoe-discovery.control
pppoe-discovery.list

procd.control	
nroad list	
procd-nand.list	
— proprietary.list	
— quagga-libzebra.control	
— quagga-libzebra.list	
— quagga-ripd.conffiles	
— quagga-watchquagga.control	
— quagga-zebra.conffiles	
— quagga-zebra.control	
— relayer.control	
— relayer.list	
— resolveip.list	
— rpcd.conffiles	
— rpcd.control	
rpcd.list	
— shadow_chage.control	
shadow-common.control	
shadow-common.control	
= snadow-common.list           = shadow-groupadd.control	
shadow-groupadd.control	
shadow-groupadd.iist               shadow-groupdel.control	
shadow-groupdel.list	
shadow-groupmod.control	
shadow-groupmod.list	
shadow groupmout Tibe	
shadow useradd.list	
shadow dserdel:list	
shadow dsermod.list	
shadow-usermod:115t	
shadow-utils.list	
sigma_dut.control	

— sigma_dut.list
- swconfig.control
— swconfig.list
- switch.control
— switch.list
— tc.control
— tc.list
— tcpdump.control
— tcpdump.list
tuxera.control
— tuxera.list
ubi-utils.control
ubi-utils.list
- ubox.control
- ubox.list
— ubus.control
- ubusd.control
— ubusd.list
— ubus.list
uci.control
— uci.list
uclient-fetch.control
uclient-fetch.list
usign.control
usign.list
usign.fist uuid.control
uuidd.control
uuidd.list
- uuidgen.control - uuidgen.list
— uuid.list
- vsftpd.conffiles
- vsftpd.control
- vsftpd.list
— wapp.control
— wapp.list
- wget.control
— wget.list
— wificonf.control
— wificonf.list
- wifi-profile.control
- wifi-profile.list
— wireless-tools.control
— wireless-tools.list
- wpad-mini.control
— wpad-mini.list
— xl2tpd.conffiles
— x12tpd.control
— xl2tpd.list

```
- zlib.control
            - zlib.list
            - zoneinfo-africa.control
            - zoneinfo-africa.list
            - zoneinfo-asia.control
            - zoneinfo-asia.list
            - zoneinfo-atlantic.control
           — zoneinfo-atlantic.list
            - zoneinfo-australasia.control
            - zoneinfo-australasia.list
          zoneinfo-europe.control
          zoneinfo-europe.list
           — zoneinfo-northamerica.control

    zoneinfo-northamerica.list

          zoneinfo-pacific.control
          ___ zoneinfo-pacific.list
            - zoneinfo-southamerica.control
          ___ zoneinfo-southamerica.list
        - lists
       — status
    - os-release
    - pppd
      └ 2.4.7
          pppol2tp.so
          pptp.so
          └─ rp-pppoe.so
- lib64 -> lib
- libexec
  └─ login.sh
- sbin
  - 6rdcalc
  adduser -> ../../bin/busybox
  — atd
  - avahi-daemon
  — blkid
  brctl -> ../../bin/busybox
  - chroot -> ../../bin/busybox
   — conntrack
   — crond -> ../../bin/busybox
   — dbus-daemon
   — deluser -> ../../bin/busybox
  - dnsmasq
  — ebtables
   - ethtool
  - groupadd
  - groupdel
   — groupmod
   — hostapd -> wpad
  - hwnat-disable.sh
```

```
- hwnat-enable.sh
 — igmpproxy
 - insmod -> ../../sbin/kmodloader
 — ip6tables -> xtables-multi
ip6tables-restore -> xtables-multi
- ip6tables-save -> xtables-multi
— iptables -> xtables-multi
iptables-restore -> xtables-multi
iptables-save -> xtables-multi
- iwconfig
- iwlist -> iwconfig
- iwpriv -> iwconfig
- lighttpd
- lmdd
- logrotate
── lsmod -> ../../sbin/kmodloader
 - memtester
miniupnpd
— modinfo -> ../../sbin/kmodloader
modprobe -> ../../sbin/kmodloader
mtpd -> ../../bin/busybox
- ntpd-hotplug
- odhcp6c
- odhcpd
- odhcpd-update
- opkg-key
 — pppd
pppoe-discovery
- quagga.init
- ripd
- rmmod -> ../../sbin/kmodloader
- swapoff -> ../../sbin/block
-> swapon -> ../../sbin/block
 — tc
- tcpdump
ubiattach
- ubiblock
- ubicrc32
 — ubidetach
 — ubiformat
— ubimkvol
- ubinfo
- ubinize
 — ubirename
— ubirmvol
- ubirsvol
 — ubiupdatevol
- useradd
- userdel
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	watchquagga	
	wpa_supplicant -> wpad	
	xl2tpd-control	
	xtables-multi	
	L zebra	
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	dbus-1	
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	session.conf	
	session.d	
	system.conf	
	system.d	
	system-services	
	libiwinfo	
	hardware.txt	
	libubox	
	jshn.sh	
	miniupnpd	
	firewall.include	
	map.dtd	
	map-mac-prefixes	
	mmap-os-db	
	map-payloads	
	map-protocols	
	map-rpc	
	map-service-probes	
	map-services	
	public_suffix_list.dat.gz	
l		
l I	unauthenticated.json	
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	zoneinfo	
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	Rankin_Inlet
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	Rio_Branco
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i i	Santa_Isabel
i	Santarem
	Santiago
	Santo_Domingo
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	— Sao_Paulo
	— Scoresbysund
	- Shiprock
	— Sitka
	— St_Barthelemy
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i i i	St_Thomas
li i i	St_Vincent
	Swift_Current
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	— Tortola
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	- Virgin
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	Yellowknife
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	— Amman
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	— Aqtau — Aqtobe
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	— Atyrau
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	Bangkok
	— Barnaul
	— Beirut
	Bishkek
	— Brunei
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	— Chungking
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	— Dacca
	— Damascus

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	— Shanghai
	— Singapore
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	— Taipei
	— Tashkent
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	Thimbu
	Thimphu
	— Tokyo
	— Tomsk
	Ujung_Pandang
	Ulaanbaatar
	— Ulan_Bator
	— Urumqi
	Ust-Nera
	- Vientiane
	- Vladivostok
	— Yakutsk
	— Yangon
	— Yekaterinburg
	Yerevan
	— Atlantic
	— Azores
	— Bermuda
	— Canary
	— Cape_Verde
	— Faeroe
	— Faroe
	Jan_Mayen
i i i	— Madeira
	Reykjavik
	— South_Georgia
	— Stanley
	St_Helena
	— Australia
	— ACT
	— Adelaide
	- Brisbane
	- Brisbane - Broken_Hill
	— Canberra
	— Currie
	— Darwin
	Eucla
	— Hobart
	— THI

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	Sydney
	— Tasmania
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	— Canada
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	— Mountain
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	Pacific
	— Saskatchewan
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		— Skopje
		— Sofia
		— Stockholm
		— Tallinn
		— Tirane
		— Tiraspol
		— Ulyanovsk
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		— Vaduz
		— Vatican
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		— Zagreb
		— Zaporozhye
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		Iceland
		Jamaica

— Japan
- Kwajalein
— Mexico
— BajaNorte
— BajaSur
General
— Navajo
├── NZ
NZ-CHAT
Pacific Pacific
— Apia
— Auckland
— Bougainville
— Chatham
— Chuuk
Easter
— Efate
- Enderbury
- Fakaofo
Funafuti
— Galapagos
— Gambier
- Guadalcanal
Honolulu
Johnston
Kosrae
Kwajalein
— Majuro
Marquesas
Midway
Image: Niue   Image: Niue
Norfolk
Noumea
Pago_Pago
Palau
Pitcairn
Pohnpei
Ponape
Port_Moresby
Rarotonga
Saipan
— Samoa
Tahiti
Tarawa
Tongatapu

```
- Truk
             - Wake
             - Wallis
             L_ Yap
           Poland
           — Portugal
           Singapore
           — US
             — Alaska
             - Aleutian
             - Arizona
             - Central
             - Eastern
             - East-Indiana
             — Hawaii
             - Indiana-Starke
             - Michigan
             - Mountain
              — Pacific
             L— Samoa
— var -> /tmp
- www
  - assets
     - common.js
      - custom.js
     ___ md5_2.js
       - respond.js
     └─ share.js
   - belkin_css
     - agreement.css
      - app.css
     - arabic.css
     bootstrap.min.css
      - login.css
     - pages.css
     - style.min.css
      - theme.blue.min.css
     theme.dark.min.css
    - block page.html
   - cgi-bin
     - backup.cgi
     - example.cgi
     — portal.cgi
     - sysinfo.cgi
      - upgrade.cgi
     wnc_maccheck.cgi
   — config-admin-backup.html
   — config-admin-firmware.html
  config-admin-gateway.html
```

```
— config-admin-mgmt.html
 — config-admin-password.html
config-admin-reset.html
 — config-admin-tz.html
config-conn-advance-routing.html
- config-conn-ipv6.html
- config-conn-mac.html
config-conn-vlan.html
- config-conn-wan.html
 — config-storage-account.html
config-storage-ftp-server.html
- config-wifi-beam.html
- config-wifi-filter.html
- config-wifi-guest.html
- config-wifi-protect.html
 — config-wifi-wireless.html
 - css
   - agreement.css
   - app.css
   bootstrap.min.css
   - login.css
   - pages.css
   - style.min.css
   - theme.blue.min.css
   theme.dark.min.css

    dashboard-configuration-admin.html

 dashboard-configuration.html
dashboard-configuration-security.html
dashboard-configuration-storage.html
— dashboard-configuration-wifi.html
- dashboard-consec-ddns.html
 — dashboard-consec-DMZ.html
dashboard-consec-ipv6.html
dashboard-consec-portforwarding.html
dashboard-consec-porttriggering.html
— dashboard-consec-qos.html
dashboard-consec-singleport.html
— dashboard-consec-vpn.html
— dashboard.html
 — dashboard-parental-control.html
— dashboard-troubleshooting-diagnostics.html
— dashboard-troubleshooting.html
— eula ar.html
- eula da.html
— eula_de.html
- eula_el.html
— eula en.html
— eula_es.html
- eula_fi.html
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— eula frc.html
 — eula_fr.html
 — eula_id.html
 — eula it.html
— eula_jp.html
 — eula kr.html
- eula_no.html
- eula pl.html
- eula pt br.html
- eula_ru.html
eula sc.html
- eula_sv.html
- eula_tc.html
- eula_th.html
- eula_tr.html
— eula vi.html
 — footer.html
guest_login.html
 — img
   ___ 3200wan.png
   - 8450wan.png
   - attention.png
   belkin-logo-01.svg
   belkin_logo_108x30.png
   - belkin-logo.svg
   belkin_menu.png
   - bk.jpg
   - cross2.png
   - cross.png
   Divider.jpg
   dropdownarrows.gif
   — dropdownarrows.png
   — green.gif
   - help backarrow.png
   - help backarrow sel.png
   help_helpicon.png
   help_nextarrow.png
   help_nextarrow_sel.png
   - help printicon.png
   - help_printicon_sel.png
   — icon_about.gif
   icon alert.gif
   - icon_b_help.svg
   icon_b_logout.svg
   - icon_help.gif
   - icon_help.svg
   - icon_info.gif
   icon_logout.gif
   icon_logout.svg
```

```
- information.png
  linksys_bg.png
  Linksys_logo_145x20.png
  linksys-logo-blue.svg
  linksys-logo.svg
  linksys-logo-white.svg
  Linksys_menu.png
  linksys-sprite-aristo.png
  login_backgroundgrad.jpeg
  login_errorarow.png
  - logo belkin.png
  logo_linksys_arabic.png
  logo_linksys.png
  MacOS_SelectionPopup.png
  mavarrow_collapsed.png
  mavarrow_expanded.png
  mavarrow_wht_collapsed.png
  mavarrow_wht_expanded.png
  port_3-belkin.png
  port_3-linksys.png
  port_4-belkin.png
  port_4-linksys.png
  port_internet-belkin.png
  port_internet-linksys.png
  - radial_bg.png
  - sprite-aristo.png
  - trap_bg.png
  - WFA WPS Mark Solo0.gif
  - WFA_WPS_Mark_Solo1.gif
   - WFA WPS Mark Solo.gif
  ☐ Windows_NetworkPopup.png
index.html
– js
 const languages.js
  - dynamic chagne languages.js
  gui_common_api.js
  ├─ jquery-3.4.1.js
  jquery.metisMenu.js
  jquery.tablesorter.min.js
  - luxon.min.js
  - moment.js
  - moment-timezone-with-data.js
  - moment-with-locales.js
  parser-network.min.js
  polyfill.min.js
  wue-i18n.js
   - vue.js
  └─ vue.min.js
— linksys_css
```

```
| app.css | arabic.css | bootstrap.min.css | pages.css | pages.css | theme.blue.min.css | theme.blue.min.css | theme.dark.min.css | theme.dark.min.css | theme.dark.min.css | theme.dark.html | status-local-network.html | status-ports.html | status-wireless-network.html | squashfs-root-0
```

## Step2. fetch all the executables from the filesystem and stored the list in a file called parsingresult.txt by using find

```
find . -exec file {} \; | grep -i "relocatable"
```

Totally there are 157 ELF executables in ARM arch, 151 relocatables, 154 shared objects. I got these results by using we

## Step3. use readelf to extract the symbol tables

Result: no stack\_canary and fortify\_source are enabled