CodeSonar Analysis Report

generated by Administrator on Wed Aug 23 15:58:11 2017

for analysis webserver analysis 1

Summary

Table 1: webserver analysis 1 Summary

Active Warnings	File Count	Project Name	Time Started	Time Finished	Machine
107	229	webserver	Mon Mar 27 00:09:07 2017	Mon Mar 27 00:11:11 2017	Jacks-MBP

Warnings

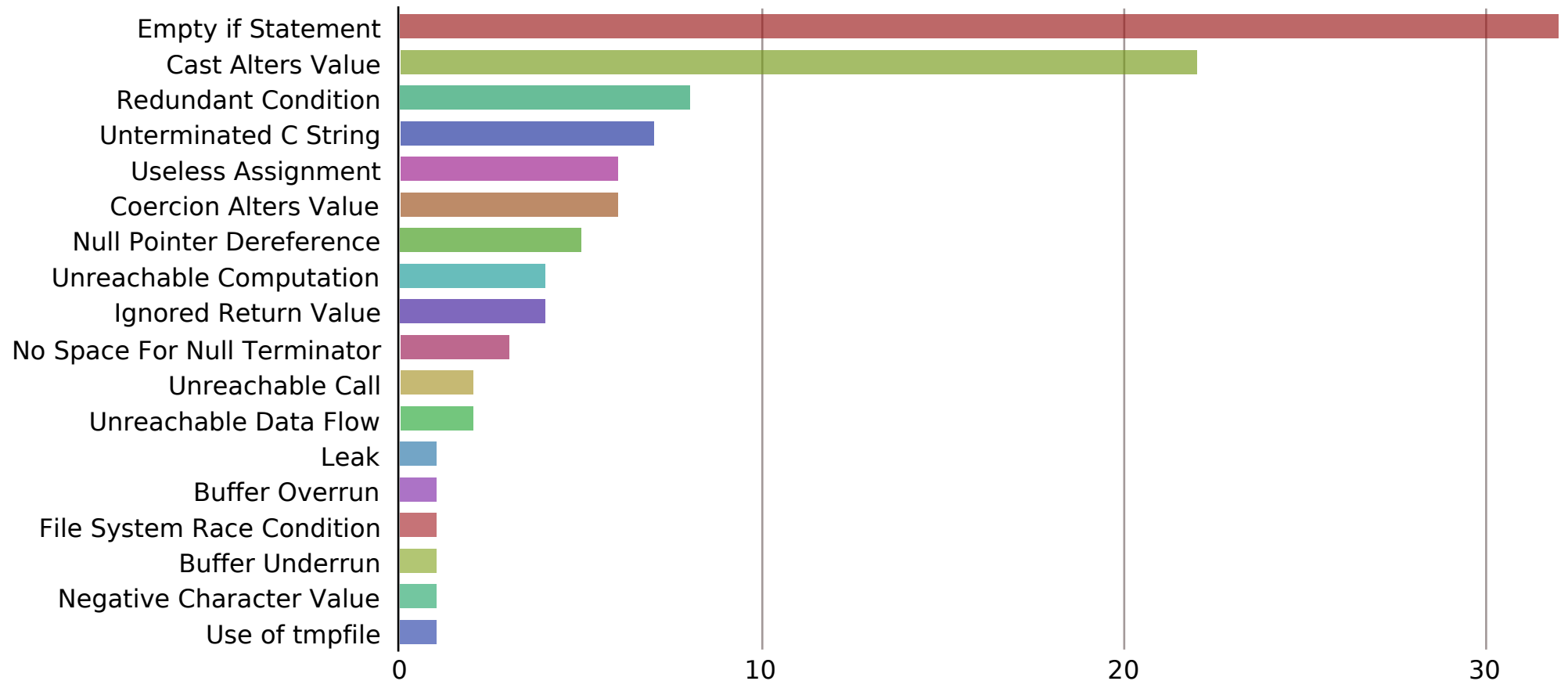## Figure 1: webserver analysis 1, Warnings by Class

Table 2: webserver analysis 1, Warnings by Class

Warning Class	Active Warnings
Empty if Statement	32
Cast Alters Value	22
Redundant Condition	8
Unterminated C String	7
Coercion Alters Value	6
Useless Assignment	6
Null Pointer Dereference	5
Unreachable Computation	4
Ignored Return Value	4
No Space For Null Terminator	3
Unreachable Call	2
Unreachable Data Flow	2
Leak	1
Buffer Overrun	1
Buffer Underrun	1
Use of tmpfile	1

Warning Class	Active Warnings
File System Race Condition	1
Negative Character Value	1

Table 3: webserver analysis 1, Warnings by File

File	Active Warnings	Total Lines	Language
resolv.c	23	1521	C
httpd-cgi.c	8	389	C
uip.c	8	1973	C
eeprom.c	6	166	C
httpd.c	6	378	C
nbr-table.c	5	483	C
psock.c	5	319	C
uaodv.c	4	616	C
uip_arp.c	4	440	C
uip-fw.c	3	536	C
cfs-posix.c	3	108	C
udp-socket.c	3	199	C

File	Active Warnings	Total Lines	Language
tcp-socket.c	2	409	C
dhcpc.c	2	431	C
ip64-addr.c	2	123	C
tcpip.c	2	849	C
webserver-nogui.c	2	90	C
rtimer.c	2	108	C
tapdev.c	2	213	C
uaodv-rt.c	1	146	C
uip-over-mesh.c	1	305	C
ifft.c	1	168	C
httpd-fs.c	1	127	C
etimer.c	1	272	C
serial-line.c	1	137	C
sensors.c	1	137	C
random.c	1	54	C
simple-udp.c	1	183	C
ctimer.c	1	175	C

File	Active Warnings	Total Lines	Language
dlloader.c	1	69	C
contiki-main.c	1	424	C
tapdev-drv.c	1	111	C
uip-fw-drv.c	1	54	C
slip.c	1	457	C
esmrf.h	0	83	C
packetbuf.c	0	254	C
roll-tm.h	0	244	C
uip-mcast6-stats.h	0	117	C
cfs-posix-dir.c	0	87	C
uaodv-def.h	0	145	C
linuxradio-drv.c	0	210	C
me_tabs.c	0	121	C
leds.c	0	119	C
ifft.h	0	58	C
http-strings.c	0	108	C
rimestats.h	0	69	C

File	Active Warnings	Total Lines	Language
settings.c	0	475	C
uip-split.c	0	158	C
httpd-fsdata.c	0	675	C
httpd-fsdata.h	0	63	C
tapdev.h	0	44	C
ringbufindex.c	0	149	C
settings.h	0	352	C
uip-neighbor.c	0	158	C
symbols.c	0	4	C
compower.h	0	135	C
watchdog.h	0	42	C
watchdog.c	0	63	C
procinit.c	0	48	C
ringbuf.c	0	123	C
queuebuf.c	0	473	C
uip-packetqueue.h	0	35	C
symbols.h	0	3	C

File	Active Warnings	Total Lines	Language
symbols.h	0	44	C
mt.c	0	109	C
slipdev.c	0	203	C
rdc.h	0	93	C
dhcpc.h	0	62	C
sensors.h	0	72	C
process.c	0	388	C
ctk.h	0	989	C
link-stats.c	0	211	C
uaodv-rt.h	0	63	C
slipdev.h	0	87	C
webserver.h	0	44	C
httpd-fs.h	0	58	C
link-stats.h	0	65	C
httpd-cgi.h	0	56	C
httpd.h	0	66	C
print-stats.c	0	87	C

File	Active Warnings	Total Lines	Language
dsc.h	0	141	C
webserver-dsc.c	0	72	C
autostart.c	0	72	C
framer.h	0	54	C
petsciiconv.h	0	79	C
llsec.h	0	80	C
netstack.h	0	136	C
trickle.h	0	94	C
radio.h	0	294	C
mac.h	0	101	C
timesynch.h	0	150	C
rucb.h	0	79	C
route.h	0	84	C
rmh.h	0	102	C
http-strings.h	0	36	C
polite.h	0	192	C
polite-announcement.h	0	68	C

File	Active Warnings	Total Lines	Language
netflood.h	0	110	C
print-stats.h	0	45	C
nbr-table.h	0	116	C

(Showing 100 of 229 Files)

Table 4: webserver analysis 1, Warning Instances

Score	Warning Class	File Name	Procedure Name	Line Number	State	Owner
78	Leak	dlloader.c	dlloader_load	46	None	None
68	Negative Character Value	resolv.c	dns_name_isequal	400	None	None
61	No Space For Null Terminator	httpd-cgi.c	make_processes	213	None	None
61	No Space For Null Terminator	resolv.c	remove_trailing_dots	1252	None	None
60	Unterminated C String	resolv.c	resolv_set_hostname	1095	None	None
60	Unterminated C String	resolv.c	resolv_set_hostname	1096	None	None
60	Unterminated C String	resolv.c	resolv_set_hostname	1097	None	None
59	File System Race Condition	eeprom.c	eeprom_init	82	None	None
58	Unterminated C String	resolv.c	resolv_lookup	1380	None	None
58	Unterminated C String	resolv.c	resolv_query	1287	None	None

Score	Warning Class	File Name	Procedure Name	Line Number	State	Owner
58	Unterminated C String	resolv.c	resolv_query	1312	None	None
58	Unterminated C String	resolv.c	resolv_query	1319	None	None
58	Buffer Overrun	webserver-nogui.c	webserver_log_file	78	None	None
57	No Space For Null Terminator	resolv.c	resolv_query	1312	None	None
49	Null Pointer Dereference	tcpip.c	tcpip_uipcall	792	None	None
48	Null Pointer Dereference	uaodv-rt.c	uaodv_rt_add	80	None	None
48	Null Pointer Dereference	resolv.c	process_thread_resolv_process	1174	None	None
48	Coercion Alters Value	contiki-main.c	main	384	None	None
48	Null Pointer Dereference	nbr-table.c	nbr_table_add_lladdr	368	None	None
46	Coercion Alters Value	httpd-cgi.c	make_processes	220	None	None
46	Coercion Alters Value	httpd-cgi.c	generate_file_stats	140	None	None
46	Coercion Alters Value	httpd-cgi.c	make_tcp_stats	189	None	None
46	Coercion Alters Value	tapdev.c	tapdev_poll	175	None	None
45	Coercion Alters Value	ifft.c	ifft	123	None	None
44	Cast Alters Value	random.c	random_rand	52	None	None
43	Null Pointer Dereference	httpd-fs.c	httpd_fs_strcmp	55	None	None
42	Cast Alters Value	resolv.c	mdns_write_announce_records	543	None	None

Score	Warning Class	File Name	Procedure Name	Line Number	State	Owner
42	Cast Alters Value	dhcpc.c	create_msg	149	None	None
42	Cast Alters Value	uaodv.c	process_thread_uaodv_process	578	None	None
42	Cast Alters Value	uip-fw.c	uip_fw_forward	468	None	None
42	Cast Alters Value	uaodv.c	send_rrep	222	None	None
42	Cast Alters Value	uip-fw.c	uip_fw_forward	469	None	None
42	Cast Alters Value	uip-fw.c	uip_fw_forward	471	None	None
42	Cast Alters Value	uaodv.c	process_thread_uaodv_process	579	None	None
42	Cast Alters Value	uip_arp.c	uip_arp_out	432	None	None
42	Cast Alters Value	resolv.c	process_thread_resolv_process	1174	None	None
42	Cast Alters Value	resolv.c	process_thread_resolv_process	1208	None	None
42	Cast Alters Value	uip_arp.c	uip_arp_arpin	319	None	None
42	Cast Alters Value	resolv.c	newdata	907	None	None
42	Cast Alters Value	uip_arp.c	uip_arp_out	416	None	None
42	Cast Alters Value	uip_arp.c	uip_arp_out	419	None	None
42	Cast Alters Value	resolv.c	check_entries	756	None	None
42	Cast Alters Value	uip.c	uip_process	1004	None	None
42	Cast Alters Value	uip.c	uip_process	1005	None	None

Score	Warning Class	File Name	Procedure Name	Line Number	State	Owner
42	Cast Alters Value	uip.c	uip_process	1007	None	None
42	Cast Alters Value	resolv.c	newdata	1070	None	None
41	Cast Alters Value	uip.c	uip_udp_new	493	None	None
39	Buffer Underrun	nbr-table.c	remove_key	195	None	None
27	Ignored Return Value	eeprom.c	eeprom_fill	60	None	None
27	Ignored Return Value	eeprom.c	eeprom_init	105	None	None
27	Ignored Return Value	eeprom.c	eeprom_read	160	None	None
27	Ignored Return Value	eeprom.c	eeprom_write	136	None	None
21	Useless Assignment	cfs-posix.c	cfs_seek	92	None	None
21	Useless Assignment	cfs-posix.c	cfs_seek	94	None	None
21	Useless Assignment	cfs-posix.c	cfs_seek	96	None	None
21	Useless Assignment	resolv.c	encode_name	464	None	None
21	Useless Assignment	resolv.c	newdata	809	None	None
21	Useless Assignment	tapdev.c	tapdev_init	141	None	None
20	Redundant Condition	ip64-addr.c	ip64_addr_6to4	97	None	None
20	Redundant Condition	nbr-table.c	nbr_table_allocate	234	None	None
20	Redundant Condition	psock.c	data_is_sent_and_acked	144	None	None

Score	Warning Class	File Name	Procedure Name	Line Number	State	Owner
20	Redundant Condition	resolv.c	mdns_prep_host_announce_packet	613	None	None
20	Redundant Condition	rtimer.c	rtimer_run_next	101	None	None
20	Redundant Condition	udp-socket.c	udp_socket_sendto	142	None	None
20	Redundant Condition	uip.c	uip_add32	252	None	None
20	Redundant Condition	uip.c	uip_process	709	None	None
18	Unreachable Call	resolv.c	mdns_prep_host_announce_packet	614	None	None
18	Unreachable Call	rtimer.c	rtimer_run_next	102	None	None
17	Unreachable Computation	ip64-addr.c	ip64_addr_6to4	98	None	None
17	Unreachable Computation	udp-socket.c	udp_socket_sendto	147	None	None
17	Unreachable Computation	uip.c	uip_add32	253	None	None
17	Unreachable Computation	uip.c	uip_process	710	None	None
14	Unreachable Data Flow	nbr-table.c	nbr_get_bit	159	None	None
14	Unreachable Data Flow	nbr-table.c	nbr_set_bit	178	None	None
12	Empty if Statement	ctimer.c	process_thread_ctimer_process	66	None	None
12	Empty if Statement	dhcpc.c	handle_dhcp	275	None	None
12	Empty if Statement	etimer.c	process_thread_etimer_process	84	None	None
12	Empty if Statement	httpd-cgi.c	file_stats	146	None	None

Score	Warning Class	File Name	Procedure Name	Line Number	State	Owner
12	Empty if Statement	httpd-cgi.c	nullfunction	118	None	None
12	Empty if Statement	httpd-cgi.c	processes	226	None	None
12	Empty if Statement	httpd-cgi.c	tcp_stats	197	None	None
12	Empty if Statement	httpd.c	handle_input	252	None	None
12	Empty if Statement	httpd.c	handle_output	222	None	None
12	Empty if Statement	httpd.c	handle_script	131	None	None
12	Empty if Statement	httpd.c	send_file	87	None	None
12	Empty if Statement	httpd.c	send_headers	192	None	None
12	Empty if Statement	httpd.c	send_part_of_file	101	None	None
12	Empty if Statement	psock.c	psock_generator_send	194	None	None
12	Empty if Statement	psock.c	psock_readbuf_len	280	None	None
12	Empty if Statement	psock.c	psock_readto	253	None	None
12	Empty if Statement	psock.c	psock_send	161	None	None
12	Empty if Statement	resolv.c	process_thread_mdns_probe_process	1122	None	None
12	Empty if Statement	resolv.c	process_thread_resolv_process	1162	None	None
12	Empty if Statement	sensors.c	process_thread_sensors_process	107	None	None
12	Empty if Statement	serial-line.c	process_thread_serial_line_process	92	None	None

Score	Warning Class	File Name	Procedure Name	Line Number	State	Owner
12	Empty if Statement	simple-udp.c	process_thread_simple_udp_process	136	None	None
12	Empty if Statement	slip.c	process_thread_slip_process	325	None	None
12	Empty if Statement	tapdev-drv.c	process_thread_tapdev_process	95	None	None
12	Empty if Statement	tcp-socket.c	newdata	124	None	None
12	Empty if Statement	tcp-socket.c	process_thread_tcp_socket_process	239	None	None

(Showing 100 of 107 Warnings)

Analysis Metrics

Table 5: webserver analysis 1 Metrics

Metric Name	Value
Blank Lines	4303
Code Lines	17061
Comment Lines	19384
Include file instances	88
Lines with Code	18184
Lines with Comments	20507
Mixed Lines	1123
Top-level file instances	88
Total Lines	41871
User-defined functions	531

File Metrics

Table 6: webserver analysis 1 File Metrics Summary

Metric Name	Max	Min	Avg
Blank Lines	238	0	18.79
Code Lines	1185	2	74.50
Comment Lines	1302	0	84.65
Cyclomatic Complexity	215	0	8.65
Lines with Code	1274	2	79.41
Lines with Comments	1422	0	89.55
Mixed Lines	120	0	4.90
Modified Cyclomatic Complexity	203	0	8.29
Taint Propagator Total	3	0	0.07
Taint Sink Total	10	0	0.42
Taint Source Total	5	0	0.04
Total Lines	2219	3	182.84

Table 7: webserver analysis 1 File Metrics Details

File	Total Lines	Lines with Code	Lines with Comments	Code Lines	Comment Lines	Blank Lines
uip.h	2219	698	1422	578	1302	219
uip.c	1973	1274	550	1185	461	238
resolv.c	1521	1039	313	986	260	222
ctk.h	989	467	506	376	415	107
tcpip.c	849	629	184	582	137	83
uipopt.h	684	159	487	122	450	75
httpd-fsdata.c	675	639	22	639	22	14
uaodv.c	616	461	89	442	70	85
uip-fw.c	536	267	218	263	214	55
process.h	531	90	386	88	384	57
trickle-timer.h	514	76	418	65	407	31
nbr-table.c	483	331	132	328	129	23
settings.c	475	284	104	281	101	90
queuebuf.c	473	365	103	345	83	25
slip.c	457	343	90	327	74	40
uip_arp.c	440	209	184	207	182	49

Table 7: webserver analysis 1 File Metrics Details

File	Total Lines	Lines with Code	Lines with Comments	Code Lines	Comment Lines	Blank Lines
dhcpc.c	431	337	55	336	54	40
tapdev6.c	425	287	80	277	70	68
contiki-main.c	424	298	94	283	79	47
trickle-timer.c	410	243	128	238	123	44
tcp-socket.c	409	307	66	307	66	36
psock.h	404	59	321	49	311	34
httpd-cgi.c	389	291	86	274	69	29
process.c	388	233	113	229	109	46
httpd.c	378	281	62	278	59	38
tcpip.h	378	55	283	53	281	42
packetbuf.h	371	153	185	141	173	45
settings.h	352	173	134	156	117	62
list.c	330	123	182	123	182	25
pt.h	322	57	231	56	230	35
psock.c	319	200	87	200	87	32
uip-over-mesh.c	305	199	71	198	70	36
tcp-socket.h	299	63	212	62	211	25

Table 7: webserver analysis 1 File Metrics Details

File	Total Lines	Lines with Code	Lines with Comments	Code Lines	Comment Lines	Blank Lines
radio.h	294	62	186	61	185	47
contiki-default-conf.h	285	95	185	63	153	37
cfs.h	285	61	200	60	199	25
announcement.h	274	35	213	34	212	27
etimer.c	272	171	74	171	74	27
mt.h	263	29	208	28	207	27
etimer.h	254	23	208	22	207	24
packetbuf.c	254	167	71	166	70	17
roll-tm.h	244	92	143	84	135	17
uip-nameserver.c	236	155	80	140	65	16
frame802154.h	230	101	138	65	102	27
packetqueue.h	222	31	168	30	167	24
tapdev.c	213	137	52	130	45	31
link-stats.c	211	120	77	117	74	17
linuxradio-drv.c	210	157	34	157	34	19
slipdev.c	203	81	104	80	103	19
tsch-conf.h	201	97	85	90	78	26

File	Total Lines	Lines with Code	Lines with Comments	Code Lines	Comment Lines	Blank Lines
udp-socket.c	199	124	55	124	55	20
ipolite.h	197	28	151	27	150	19
elfloader.h	194	40	143	34	137	17
udp-socket.h	193	33	147	32	146	14
polite.h	192	25	150	24	149	18
contiki-conf.h	190	74	96	70	92	24
uip-mcast6.h	186	53	122	48	117	16
mtarch.c	185	92	66	84	58	35
simple-udp.c	183	100	64	100	64	19
aes-128.c	183	108	57	108	57	18
ccm-star.c	177	111	50	111	50	16
uip-fw.h	176	34	127	30	123	19
ctimer.c	175	112	51	112	51	12
collect.h	171	86	71	74	59	26
rtimer.h	169	37	115	33	111	21
ifft.c	168	94	57	93	56	18
ctimer.h	166	20	133	19	132	14

File	Total Lines	Lines with Code	Lines with Comments	Code Lines	Comment Lines	Blank Lines
eeprom.c	166	87	51	87	51	28
cc.h	165	64	96	47	79	22
mmem.c	164	49	98	49	98	17
stimer.c	163	36	120	36	120	7
simple-udp.h	163	33	115	32	114	16
gcr.c	162	65	92	57	84	13
uip-neighbor.c	158	88	56	86	54	16
uip-split.c	158	77	73	65	61	20
list.h	157	30	111	29	110	17
energest.h	155	94	44	91	41	20
timesynch.h	150	12	125	11	124	14
ringbufindex.c	149	67	78	67	78	4
timer.c	148	30	112	30	112	6
mesh.h	146	24	110	23	109	13
clock.h	146	18	115	17	114	14
uaodv-rt.c	146	83	49	82	48	15
uaodv-def.h	145	81	49	76	44	20

File	Total Lines	Lines with Code	Lines with Comments	Code Lines	Comment Lines	Blank Lines
abc.h	144	21	108	20	107	16
uiplib.c	143	92	41	90	39	12
uip_arp.h	142	23	98	22	97	22
dsc.h	141	41	103	24	86	14
elfloader-arch.h	139	10	120	9	119	10
broadcast.h	139	20	107	19	106	13
memb.h	138	21	102	20	101	16
linkaddr.h	138	24	103	20	99	15
sensors.c	137	77	41	77	41	19
serial-line.c	137	73	50	69	46	18
netstack.h	136	74	65	52	43	19
compower.h	135	12	111	11	110	13
ringbuf.h	135	15	106	14	105	15
arg.c	133	28	98	28	98	7
uip_arch.h	133	9	113	8	112	12
loader.h	132	28	107	12	91	13

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