

Safari

1.6.2470 WNAME Safari iOS.

(SSID), , « » .
IP- . HTTP- -, . «» . , , , . :

```
http://captive.apple.com/hotspot-detect.html
http://gstatic.com/generate_204
```

, . -, Safari Chrome . , , - . , « » Captive Network Assistant (CNA) Browser, JavaScript, (, Cookies) .
, , (WPA2-Personal) «», - .
- .
Android- -. Android, (), .
iOS - "" , -, , , . , - cookies, "" , - .

, Safari, .

1. nginx , WNAME HTTPS-. , Let's Encrypt () SSL-, nginx, HTTPS (, <https://wifi.provider.ru/cp/mikrotik>), HTTPS- (dst port tcp:443) **walled garden**
2. DHCP , DNS- , 8.8.8.8.
3. Wi-Fi DNS-, , **captive.apple.com** , IP- WNAME. DNS- :

```
captive.apple.com IN A 192.168.1.100 # WNAME
```

, **walled garden** DNS-, captive.apple.com. , Mikrotik, DNS-, Mikrotik DNS- /

Bridge	Close Add New					
Switch						
PPP						
Mesh						
IP						
ARP						
Accounting						
Addresses						
Cloud						
DHCP Client						
DHCP Relay						
DHCP Server						
DNS						
Firewall						

2 items

	#	Name	Regexp	Address	TTL (s)
;;; defconf					
- D	0	router.lan		192.168.88.1	1d 00:00:00
- D	1	captive.apple.com		172.16.130.5	00:10:00

Mesh	7 items							
IP								
ARP	- D	0	allow			butters.k18.netams.com	443	0
Accounting	- D	1	allow				443	0
Addresses	;;; place hotspot rules here							
Cloud	- E X	2	allow					0
DHCP Client	- D	3	allow			172.16.130.5	80	0
DHCP Relay	- D	4	allow			esia-portal1.test.gosuslugi.ru	443	0
DHCP Server	- D	5	allow			modul.promo	443	0
DNS	- D	6	allow			captive.apple.com	80	43
Firewall								
Hotspot								

4. WNAM " CNA" "" "".

Страница выхода из CNA

Выход из CNA (по умолчанию)

Выбор

Сохранить изменения

" " "" (cna_escape.html).

5a. WNAM 443 (HTTPS-), (Mikrotik) Safari. , "", (), API, HTTPS ., Mikrotik .

5b. WNAM (80 8080), " " Safari .

WNAM :

```

19:41:26.460 DEBUG [c.netams.wnam.web.cna.CnaController:86] - Request /hotspot-detect.html from 10.130.129.98 attempt 0
total 6 UA='CaptiveNetworkSupport-390.60.1 wispr'
19:41:28.275 DEBUG [c.netams.wnam.web.cna.CnaController:86] - Request /hotspot-detect.html from 10.130.129.98 attempt 1
total 7 UA='Mozilla/5.0 (iPhone; CPU iPhone OS 13_5_1 like Mac OS X) AppleWebKit/605.1.15 (KHTML, like Gecko) Mobile
/15E148'
19:41:29.285 DEBUG [c.netams.wnam.web.cna.CnaController:86] - Request /hotspot-detect.html from 10.130.129.98 attempt 2
total 8 UA='CaptiveNetworkSupport-390.60.1 wispr'
19:41:34.951 DEBUG [c.n.w.s.vendors.MikrotikService:342] - CP mikrotik clicked: username=24:9E:CF:6C:3F:10, ip=10.
130.129.98, dst='http://www.ru/', server_address=10.130.129.1:80, server_name='wnam1', location=1
19:41:34.987 DEBUG [com.netams.wnam.web.cp.PageGenerator:644] - processAuthRequest MIKROTIK: username=24:9E:CF:6C:
3F:10, ip=10.130.129.98, server=10.130.129.1:80, site_id=1, dst='http://wnam.ru' adv curr/max=1/1
19:41:34.990 DEBUG [com.netams.wnam.web.cp.PageGenerator:1142] - captive portal redirected to SMS page, username=24:9E:
CF:6C:3F:10, cust=24:9E:CF:6C:3F:10, form='5f21574af572b1641811b819'
19:41:39.551 DEBUG [c.n.w.web.cp.CaptivePortalController:904] - postSms: site_id=1, username=24:9E:CF:6C:3F:10,
phone=79996662255, smscode=null, ci.key=14fdc823-51b4-4e2d-afd2-6484167a09f5
19:41:39.566 DEBUG [com.netams.wnam.web.cp.SmsHandler:84] - CP SMS phase 1: mac=24:9E:CF:6C:3F:10, ip=10.130.129.98,
phone=79996662255, smscode=6489, lang=null, ci.lang=ru
19:41:39.567 DEBUG [c.n.w.services.sms.providers.TestSms:16] - Test provider SMS to: 79996662255, code: 24:9E:CF:6C:3F:
10: 6489
19:41:42.411 DEBUG [c.n.w.web.cp.CaptivePortalController:904] - postSms: site_id=1, username=24:9E:CF:6C:3F:10,
phone=79996662255, smscode=6489, ci.key=14fdc823-51b4-4e2d-afd2-6484167a09f5
19:41:42.417 DEBUG [c.n.w.web.cp.CaptivePortalController:1038] - postSmsPhase2 phone=79996662255, code=6489, r={ ip=10.
130.129.98, mac=24:9E:CF:6C:3F:10, phone=79996662255, code=6489, attempts=0 }, r_ir=false, ap_m=SMS
19:41:42.420 DEBUG [c.n.w.web.cp.CaptivePortalController:1049] - CP SMS phase 2: mac=24:9E:CF:6C:3F:10, ip=10.130.129.98,
phone=79996662255, smscode=6489 CORRECT in 2855 ms.
19:41:42.423 DEBUG [com.netams.wnam.web.cp.PageGenerator:387] - processRedirectRequestCi mac=24:9E:CF:6C:3F:10,
method=FORM, formName=5f215761f572b1641811b82f, redirectUrl=http://wnam.ru, key=14fdc823-51b4-4e2d-afd2-6484167a09f5
19:41:44.244 DEBUG [c.n.w.web.cp.CaptivePortalController:2003] - webLoginCi: site_id=1, username=24:9E:CF:6C:3F:10, dst='http
://wnam.ru', dst_extra='http://wnam.ru'
19:41:44.244 DEBUG [com.netams.wnam.web.cp.PageGenerator:771] - loginAtNasCi MIKROTIK mac=24:9E:CF:6C:3F:10, ip=10.
130.129.98, server=10.130.129.1:80, dst='http://wnam.ru'
19:41:44.247 DEBUG [c.n.w.s.vendors.MikrotikService:288] - backToMikrotik login len=533, server='10.130.129.1:80',
username=24:9E:CF:6C:3F:10, password=password, dst='http://wnam.ru'
19:41:46.788 DEBUG [c.n.wnam.services.WnamCmdService:1420] - AUTH for new session ID=80d00018-200801-6c3f20, request
MAC=24:9E:CF:6C:3F:10, IP=10.130.129.98, cust_clientid=iAX, site_id=1
19:41:46.817 DEBUG [c.n.wnam.services.WnamCmdService:663] - ACCT Start existing session ID=80d00018-200801-6c3f20,
MAC=24:9E:CF:6C:3F:10, IP=10.130.129.98, NAS_IP=172.16.130.10, site_id=1

```



cna_escape.mp4