

Mikrotik

WNAM , HTTP- , , . (hotspot), Mikrotik. - (UniFi, D-Link, - Mikrotik).

 Mikrotik RouterOS 7. .

```

:
/ ip hotspot walled-garden
add dst-host=wnam_ip dst-port=80
/ ip hotspot walled-garden ip
add action=accept disabled=no dst-address=wnam_ip !dst-address-list dst-port=80 protocol=tcp !src-address !src-address-list

```

wnam_ip ip- WNAM.

: <http://www.netams.com/files/wnam/misc/mikrotik.txt>.

- . Mikrotik. .

, IP-. 10.130.1.1 (ether2-master-local, bridge-local), 172.16.130.9 ether1-gateway, "" .

Quick Set

Wireless

Interfaces

Bridge

Switch

PPP

Mesh

MPLS

IP

ARP

Accounting

Addresses

Cloud

DHCP Client

Add New

3 items

		Address	Network	Interface
;;; default configuration				
-	D	10.130.1.1/24	10.130.1.0	ether2-master-local
-	E	X 10.130.2.1/24	10.130.2.0	wlan1
;;; WAN				
-	D	172.16.130.9/24	172.16.130.0	ether1-gateway

IP- , .

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Pool

OKCancelApplyRemove

Name

dhcp1

Addresses

▼10.130.1.10-10.130.1.254▲

Next Pool

▲none▼

DHCP-, .

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SNMP

Services

Settings

Socks

TFTP

Traffic Flow

OK

Cancel

Apply

Remove

not invalid

Enabled

☒

Name

default

Interface

bridge-local

Relay

Lease Time

06:00:00

Bootp Lease Time

forever

Address Pool

dhcp1

Src. Address

Delay Threshold

Authoritative

after 2s delay

Bootp Support

static

Lease Script

Add ARP For Leases

☒

Always Broadcast

☐

Use RADIUS

☐

, DHCP- , DHCP- IP- Mikrotik . UniFi, DHCP (43).

Bridge

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Services

OK

Cancel

Apply

Remove

Address

10.130.1.0/24

Gateway

▼

10.130.1.1

▲

Netmask

▲

24

DNS Servers

▼

8.8.8.8

▲

Domain

▼

WINS Servers

▼

NTP Servers

▼

CAPS Managers

▼

Next Server

▼

Boot File Name

▼

DHCP Options

▼

unifi

▼

▲

DHCP Option Set

▼

Comment

default configuration

, NAT (masquerade,). . NAT .

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Filter Rules

NAT

Mangle

Service Ports

Connections

Address Lists

Layer7 Protocols

Add New

Reset All Counters

19 items

		#	Action	Chain	Src. Address	Dst. Address	Prot...	Src. Port	Dst. Port	Any. Port	In. Interf...	Out. Interface
-	D	0	jump	dstnat								
-	D	1	jump	hotspot								
-	D	2	redirect	hotspot			17 (udp)		53			
-	D	3	redirect	hotspot			6 (tcp)		53			
-	D	4	redirect	hotspot			6 (tcp)		80			
-	D	5	redirect	hotspot			6 (tcp)		443			
-	D	6	jump	hotspot			6 (tcp)					
-	D	7	jump	hotspot			6 (tcp)					
-	D	8	redirect	hs-unauth			6 (tcp)		80			
-	D	9	redirect	hs-unauth			6 (tcp)		3128			
-	D	10	redirect	hs-unauth			6 (tcp)		8080			
-	D	11	redirect	hs-unauth			6 (tcp)		443			
-	D	12	jump	hs-unauth			6 (tcp)		25			
-	D	13	redirect	hs-auth			6 (tcp)					
-	D	14	jump	hs-auth			6 (tcp)		25			
;;; place hotspot rules here												
-	E	X	15	passthrough	unused-hs-d							
-	D		16	masquerade	srcnat	10.130.1.0/24						ether1-gateway

!

(firewall) fasttrack:

action=fasttrack-connection chain=forward comment="default configuration" connection-state=established,related

, , (Hotspot). ().

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Service Ports

Walled Garden

Walled Garden IP List

Cookies

Add New

Hotspot Setup

2 items

		Name	Interface	Address Pool	Profile	Addresses Per MAC
-	D	mk1-hs	bridge-local	none	mk1	
-	D	mk2-hs	wlan1	dhcp2	mk2	1

() , , , DHCP .

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OK

Cancel

Apply

Remove

Reset HTML

not invalid

not HTTPS

Enabled

☒

Name

mk1-hs

Interface

bridge-local

Address Pool

none

Profile

mk1

Idle Timeout

Keepalive Timeout

Addresses Per MAC

IP of DNS Name

0.0.0.0

Proxy Status

running

: hotspot, . "HTTP PAP". (Interim Update). , Location ID, .

255 IP ▼	Name	mk1
ARP	Hotspot Address ▲	10.130.1.1
Accounting	DNS Name ▼	
Addresses	HTML Directory	hotspot ▼
Cloud	Rate Limit (rx/tx) ▼	
DHCP Client	HTTP Proxy ▼	
DHCP Relay	HTTP Proxy Port	0
DHCP Server	SMTP Server ▼	
DNS		
Firewall		
Hotspot	Login By	☐ MAC ☐ Cookie ☐ HTTP CHAP ☐ HTTPS ☒ HTTP PAP ☐ Trial ☐ MAC Cookie
IPsec	MAC Auth. Password	
Neighbors	HTTP Cookie Lifetime	3d 00:00:00
Packing	SSL Certificate	none ▼
Pool	Split User Domain	☐
Routes	Trial Uptime Limit	00:30:00
SMB	Trial Uptime Reset	1d 00:00:00
SNMP	Trial User Profile	default1 ▼
Services		
Settings	Use RADIUS	☒
Socks	Default Domain ▼	
TFTP	Location ID ▼	
Traffic Flow	Location Name ▼	
UPnP	MAC Format	XX:XX:XX:XX:XX:XX ▼
Web Proxy	Accounting	☒
Routing ▶		
System ▶		
Queues		
Files		
Log		
Radius		
New Terminal		
Tools ▶		
MetaROUTER		
Partition		
Make Supout.rif		
Undo		
Redo		
Hide Menu		
Hide Passwords		
Safe Mode		
Design Skin		

Manual WinBox	Interim Update ▲00:10:00 NAS Port Type19 (wireless-802.11) ▼
-------------------------------------	--

, . , . "Session Timeout" , (-). WNAME "" ().

255 IP ▼	Name	default1
ARP	Address Pool	none ▼
Accounting	Session Timeout	▼
Addresses	Idle Timeout	▼
Cloud	Keepalive Timeout	▼
DHCP Client	Status Autorefresh	01:00:00
DHCP Relay	Shared Users	▼
DHCP Server	Rate Limit (rx/tx)	▼
DNS	Add MAC Cookie	☐
Firewall	MAC Cookie Timeout	3d 00:00:00
Hotspot	Address List	▼
IPsec	Incoming Filter	▼
Neighbors	Outgoing Filter	▼
Packing	Incoming Packet Mark	▼
Pool	Outgoing Packet Mark	▼
Routes	Open Status Page	always ▼
SMB	Transparent Proxy	☐
SNMP	Insert Queue Before	▼
Services	Parent Queue	▼
Settings	Queue Type	▼
Socks	Advertise	☐
TFTP	Advertise URL	http://www.mikrotik.com/ ▲
Traffic Flow		http://www.routerboard.com/ ▲
UPnP	Advertise Interval	00:30:00 ▲
Web Proxy		00:10:00 ▲
Routing ▶		
System ▶		
Queues		
Files		
Log		
Radius		
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Tools ▶		
MetaROUTER		
Partition		
Make Supout.rif		
Undo		
Redo		
Hide Menu		
Hide Passwords		
Safe Mode		

, (, , ,), (-) "IP Bindings", IP-

Quick Set

CAPsMAN

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255 IP

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Add New

2 items

		#	MAC Address	Address	To Address	Server	
-	D	P	0	DC:9F:0A:00:00:00	0.0.0.0	10.130.3.254	all
;;; POS Terminal #123							
-	D	P	1	4C:57:00:00:00:00	0.0.0.0		all

Quick Set

CAPsMAN

Wireless

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Hotspot

OK

Cancel

Apply

Remove

bypassed

Enabled

☒

MAC Address

▲

4C:57:00:00:00:00

Address

▲

0.0.0.0

To Address

▼

Server

all ▼

Type

bypassed ▼

Comment

POS Terminal #123

VIP-, -. WNAM, , .

WNAM , , , . "" Walled Garden .

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Cookies

Add New

Reset All Counters

2 items

	▲ Action	Server	Method	Dst. Host	Dst. Port	Hits	
D	allow			172.16.130.5	8080	125	
;;; place hotspot rules here							
E X	allow					0	

WNAM IP- 172.16.130.5 ("") 8080 (WNAM). Nginx -, 80, 80. 443, Nginx SSL.

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OK

Cancel

Apply

Remove

Reset Counters

Enabled ☒

Action ☒ allow ☐ deny

Server ▼

Src. Address ▼

Dst. Address

Method ▼

Dst. Host ▲

Dst. Port ▲

Path ▼

Hits 125

Comment

RADIUS, RADIUS- . WNAM 172.16.130.13.

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Traffic Flow

UPnP

Web Proxy

Routing

System

Queues

Files

Log

Radius

Add NewIncoming

1 item

	#	Service	Called ID	Domain	Address	Secret
- D	0	hotspot			172.16.130.13	*****

UDP (), (), /etc/freeradius/clients.conf.

Bridge	OK	Cancel	Apply	Remove	Reset Status
Switch					
PPP					
Mesh					
MPLS ▶					
IP ▼					
ARP					
Accounting					
Addresses					
Cloud					
DHCP Client					
DHCP Relay					
DHCP Server					
DNS					
Firewall					
Hotspot					
IPsec					
Neighbors					
Packing					
Pool					
Routes					
SMB					
SNMP					
Services					
Settings					
Socks					
TFTP					
Traffic Flow					
UPnP					
Web Proxy					
Routing ▶					
System ▶					
Queues					
Files					
Log					
Radius					
New Terminal					
Tools ▶					
MetaROUTER					
Partition					

Enabled		☒
Service	☐ ppp ☐ login ☒ hotspot ☐ wireless ☐ dhcp	
Called ID	▼	
Domain	▼	
Address	172.16.130.13	
Secret		
Authentication Port	1812	
Accounting Port	1813	
Timeout	300	ms
Accounting Backup	☐	
Realm	▼	
Src. Address	▼	
Pending	0	
Requests	55	
Accepts	54	
Rejects	0	
Resends	3	
Timeouts	1	
Bad Replies	0	
Last Request RTT	20	
Comment		

NetFlow (IP-, TCP/IP) WNAM. (traffic flow) .

Bridge

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UPnP

Apply

Targets

Enabled

☒

Interfaces

▼

bridge-local

▼

▲

Cache Entries

32k

▼

Active Flow Timeout

00:30:00

Inactive Flow Timeout

00:00:15

Finished Flows

0

Active Flows

0

Unmanaged Packets

0

Unmanaged Bytes

0

(WNAM) NetFlow .

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Traffic Flow

UPnP

OKCancelApplyRemove

Address172.16.130.5

Port20002

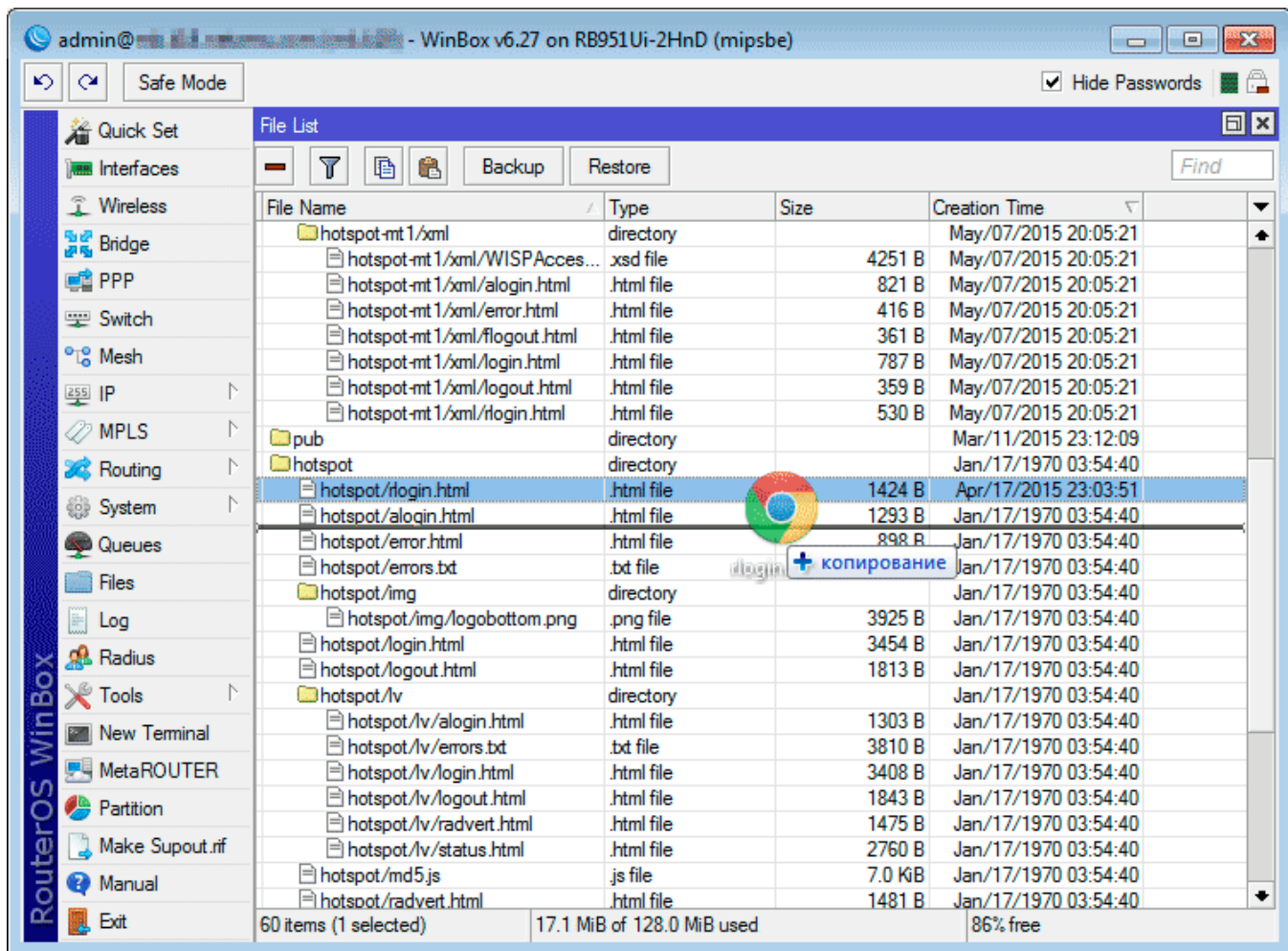
Version5

v9 Template Refresh20

v9 Template Timeout1800

rlogin.html /hotspot/ Mikrotik. winbox.exe (CLI).

! , /v/ ().



: <http://www.netams.com/files/wnam/misc/>.

HTML- (-), "..."

(,) . - WNAM.

, , :

- action="http://172.16.130.5:8080/cp/mikrotik" - () WNAM, TCP- , - Tomcat - WNAM (80 8080). "/cp/mikrotik" . Mikrotik, .
- name="site-id" value = "1" - , . WNAM, IP- , () .

login.html, .

Mikrotik .

WNAM " ", "Mikrotik", IP-, " " .

Изменение сервера доступа

Параметры

RADIUS

SNMP/TACACS+

Порты

Категории

⚙

Клиент

Тип

Имя устройства

Mikrotik

IP адрес (NAS-IP-Address)

Внешний IP адрес

172.16.130.9

192.168.1.1

Местоположение

test

Комментарий

Логин ?

Пароль ?

wnam

....

👁

☒ Использовать счетчики аккаунтинга

получено 0 записей

☒ Менять местами счетчики приёма/передачи

☒ Определять имена устройств абонентов

☒ Принимать детализацию потоков NetFlow

получено 0 записей

Вкл.

Сохранить изменения

Заккрыть

, -, , . , (http://wiki.mikbill.ru/billing/nas_access_server/mikrotik_hosts).

1. Mikrotik Winbox

System\Scheduler .

Schedule <clear_not_auth>

Name: clear_not_auth

Start Date: Mar/30/2016

Start Time: 15:45:57

Interval: 00:05:00

On Event:

```
foreach i in [ /ip hotspot host find where
authorized =no and bypassed =no ] do={
/ip hotspot host remove $i
}
```

Owner: dh

Policy:

ftp

read

policy

password

sensitive

reboot

write

test

sniff

Run Count: 60

Next Run: Mar/30/2016 23:50:57

enabled

OK

Cancel

Apply

Disable

Comment

Copy

Remove

, "On Event" :

```
:foreach i in [ /ip hotspot host find where authorized =no and bypassed =no ] do={
/ip hotspot host remove $i
}
```

c .

2.

Schedule <clear_idle>

Name:

clear_idle

Start Date:

Mar/30/2016

Start Time:

15:45:57

▼

Interval:

00:05:00

On Event:

```
foreach i in [ /ip hotspot host find where
idle-time>00:01:00 ] do={
/ip hotspot host remove $i
}
```

OK

Cancel

Apply

Disable

Comment

Copy

Remove

Owner:

dh

Policy:

☒ ftp
☒ reboot

☒ read
☒ write

☒ policy
☒ test

☒ password
☒ sniff

☒ sensitive

Run Count:

0

Next Run:

Mar/31/2016 00:05:57

enabled

, "On Event" :

```
:foreach i in [ /ip hotspot host find where idle-time>00:01:00 ] do={
/ip hotspot host remove $i
}
```