

# FortiWLC

1.5 WNAM FortiWLC . FortiWLC ( WNAM) HTTP/HTTPS- RADIUS- ( WNAM). ( FortiWLC 50D-VM 8.4.2, VMware).

RADIUS- . "RADIUS" "ADD" . RADIUS- , .

FortiWLC 8.4-2build-1 | FortiWLC-50D-VM

17:47:26FWC-VM-50@192.168.97.3

Monitor

Configuration

System Config

Security

Profile

**RADIUS**

Captive Portal

RADIUS Profiles (2 entries)

REFRESH

ADD

EDIT

DELETE

VIEW

	RADIUS Profile Name	RADIUS IP	RADIUS Port	Remote RADIUS Server	RADIUS Relay AP-ID	MAC Address Delimiter	Password Type	Called-Station-ID Type	Owner	RADIUS Server Timeout	RADIUS Server Retries
	wnam_radius	77.241	1812	Off	1	Colon (:)	Shared Key	MacAddress:SSID	controller	2	3
	wnam_radius_acct	77.241	1813	Off	1	Colon (:)	Shared Key	MacAddress:SSID	controller	2	3

RADIUS- ( WNAM - 77.241..).

FortiWLC 8.4-2build-1 | FortiWLC-50D-VM

17:47:40FWC-VM-50@192.168.97.3

Monitor

Configuration

System Config

Security

Profile

**RADIUS**

Captive Portal

Guest Users

MAC Filtering

WAPI Server

VPN Client

VPN Server

Certificates

Rogue APs

Wireless

RADIUS Profiles - Update

Profile Name

wnam\_radius

Description

WNAM Radius server

Enter 0-128 chars.

RADIUS IP

77241

RADIUS Secret

\*\*\*\*\*

Enter 1- 64 chars.

RADIUS Port

1812

Valid range: [1024-65535]

Remote RADIUS Server

Off

RADIUS Relay AP-ID

1

MAC Address Delimiter

Colon (:)

Password Type

Shared Key

Called-Station-ID Type

MacAddress:SSID

COA

On

RADIUS Server Timeout

2

Valid range: [1-20]

RADIUS Server Retries

3

Valid range: [1-10]

RADIUS- ( WNAM - 77.241..).

FortiWLC 8.4-2build-1 | FortiWLC-50D-VM
17:47:49
FWC-VM-50@192.168.97.3

Monitor
Configuration
System Config
Security
Profile
**RADIUS**
Captive Portal
Guest Users
MAC Filtering
WAPI Server
VPN Client
VPN Server
Certificates
Rogue APs
Wireless

### RADIUS Profiles - Update ?

Profile Name	wnam_radius_acct		
Description	WNAM Radius Acct server <small>Enter 0-128 chars.</small>		
RADIUS IP	77	241	
RADIUS Secret	***** <small>Enter 1- 64 chars.</small>		
RADIUS Port	1813	<small>Valid range: [1024-65535]</small>	
Remote RADIUS Server	Off		
RADIUS Relay AP-ID	1		
MAC Address Delimiter	Colon (:)		
Password Type	Shared Key		
Called-Station-ID Type	MacAddress:SSID		
COA	Off		
RADIUS Server Timeout	2	<small>Valid range: [1-20]</small>	
RADIUS Server Retries	3	<small>Valid range: [1-10]</small>	

Captive-. "Captive Portal" "Global Settings", "https" "Default" "Certificate".

FortiWLC 8.4-2build-1 | FortiWLC-50D-VM
17:48:17
FWC-VM-50@192.168.97.3

Monitor
Configuration
System Config
Security
Profile
RADIUS
**Captive Portal**
Guest Users

### Captive Portal - Global Settings ?

Global Settings
Captive Portal Profiles
Captive Portal Exemptions

#### Internal Portal Settings

Portal URL

Protocol
☒ https ☐ http

Certificate
--Default--

\* Please make sure DNS server has the above redirection URL entry mapped to the Controller's IP address

Captive- (WNAM-CP) "Captive Portal" "Captive Portal Profiles" .

FortiWLC 8.4-2build-1 | FortiWLC-50D-VM
17:48:22
FWC-VM-50@192.168.97.3

Monitor
Configuration
System Config
Security
Profile
RADIUS
**Captive Portal**

### Captive Portal Profiles ?

Global Settings
**Captive Portal Profiles**
Captive Portal Exemptions

REFRESH
ADD
DELETE

	CP Name	Owner	CNA bypass	Authentication Type	Primary Profile	Secondary Profile	Primary Accounting	Secondary Accounting	Captive Portal External Server Type	Captive Portal Exemption
		ALL	ALL							
	WNAM-CP	controller	Off	radius	wnam_radius		wnam_radius_acct		Fortinet-Connect	1

- Captive-. - Captive- "Captive Portal" "Captive Portal Exemptions" .



Edit Captive Portal Exemptions

Profile Name1

Descriptionwnam\_passEnter 0-128 chars.

FQDNEnter 1-256 chars.

ADD

Added FQDN

<input type="checkbox"/>	FQDN
<input type="checkbox"/>	http://77.241.11.11

DELETE

SAVE

CANCEL

, SSID (: sp\_FWC-test) Captive-.

FortiNET

FortiWLC 8.4-2build-1 | FortiWLC-50D-VM

17:49:24 FWC-VM-50@192.168.97.3

admin

Monitor

Configuration

System Config

Security

Profile

RADIUS

Captive Portal

Guest Users

Security Profiles (3 entries)

REFRESH

ADD

EDIT

DELETE

VIEW

	Security Profile Name	L2 Modes Allowed	Data Encrypt	Captive Portal	Captive Portal profile	MAC Filtering	Firewall Capability	Captive Portal Bypass For MAC Authentication	Firewall Filter ID	Passthrough Firewall Filter ID	802.11W - Management Frame Protection	Online Sign Up	Owner
	default	Open	None	Disabled		Off	none	Off			disable	not-configured	controller
	sp_FWC-test	Open	None	WebAuth	WNAM-CP	On	none	On		wnam_filter	disable	not-configured	controller

(wnam\_filter), - SSID.

Monitor

Configuration

System Config

Security

Profile

RADIUS

Captive Portal

Guest Users

MAC Filtering

WAPI Server

VPN Client

VPN Server

Certificates

Rogue APs

Wireless

Wired

Policies

VPN Client

VPN Server

Certificates

Rogue APs

Wireless

Wired

Security Profiles - Update

Profile Name

sp\_FWC-test

SECURITY SETTINGS

Online Sign Up

not-configured

Security Mode

Open

CAPTIVE PORTAL SETTINGS

Captive Portal

WebAuth

Captive Portal profile

WNAM-CP

Captive Portal Authentication Method

external

Passthrough Firewall Filter ID

wnam\_filter

Enter 0-16 chars.

MAC FILTERING SETTINGS

MAC Filtering

On

ACL Environment State

Disabled

MAC Auth Primary RADIUS Profile Name

wnam\_radius

MAC Auth Secondary RADIUS Profile Name

No RADIUS

MAC Accounting Primary RADIUS Profile Name

wnam\_radius\_acct

MAC Accounting Secondary RADIUS Profile Name

No RADIUS

FIREWALL SETTINGS

Firewall Capability

none

GENERAL SETTINGS

Captive Portal Bypass For MAC Authentication

On

Security Logging

On

Show Detail Info...

( "QoS" "QoS and Firewall Rules" ) , 80 WNAM.

Fortinet

FortiWLC 8.4-2build-1 | FortiWLC-50D-VM

17:50:04

FWC-VM-50@192.168.97.3

admin

Monitor

Configuration

System Config

Security

Wireless

Wired

Policies

QoS

Service Control

Devices

Access Control

WIPS

QoS and Firewall Rules (9 entries)

Global Quality-of-Service Parameters

QoS and Firewall Rules

QoS Codec Rules

Marking Management Packets

REFRESH

ADD

EDIT

DELETE

VIEW

	ID	Destination IP	Destination Netmask	Destination Port	Source IP	Source Netmask	Source Port	Network Protocol	Firewall Filter ID	Packet minimum length	Packet maximum length	QoS Protocol
	1	0.0.0.0	0.0.0.0	1720	0.0.0.0	0.0.0.0	0	6		0	0	H.323
	2	0.0.0.0	0.0.0.0	0	0.0.0.0	0.0.0.0	1720	6		0	0	H.323
	3	0.0.0.0	0.0.0.0	5060	0.0.0.0	0.0.0.0	0	17		0	0	SIP
	5	0.0.0.0	0.0.0.0	5060	0.0.0.0	0.0.0.0	0	6		0	0	SIP
	7	0.0.0.0	0.0.0.0	5200	0.0.0.0	0.0.0.0	0	17		0	0	other
	8	0.0.0.0	0.0.0.0	0	0.0.0.0	0.0.0.0	5200	17		0	0	other
	100	77.241.1	255.255.255.255	80	0.0.0.0	0.0.0.0	0	6	wnam_filter	0	0	other
	101	0.0.0.0	0.0.0.0	0	77.241	255.255.255.255	80	6	wnam_filter	0	0	other
	1000	0.0.0.0	0.0.0.0	0	0.0.0.0	0.0.0.0	0	0	wnam_filter	0	0	other

"QoS"

FortiWLC 8.4-2build-1 | FortiWLC-50D-VM
17:50:26 FWC-VM-50@192.168.97.3

Monitor
Configuration
System Config
Security
Wireless
Wired
Policies
QoS
Service Control
Devices
Access Control
WIPS
Maintenance

ID
100
Match
Flow Class

Destination IP
77 241
Destination Netmask
255 255 255 255
Destination Port
80 Valid range: [0-65535]
Source IP
0 0 0 0
Source Netmask
0 0 0 0
Source Port
0 Valid range: [0-65535]
Network Protocol
6 Valid range: [0-255]
Firewall Filter ID
wnam\_filter Enter 0-16 chars.
Packet minimum length
0 Valid range: [0-1500]
Packet maximum length
0 Valid range: [0-1500]
QoS Protocol
other
Average Packet Rate
0 Valid range: [0-200]
Action
FORWARD
Token Bucket Rate
0 Kbps Mbps Valid range: [0-1000]
Priority
0 Valid range: [0-8]
Traffic Control
Off
DiffServ Codepoint
DiffServ Disabled
Qos Rule Logging
Off

WNAM

WNAM " " , .

## Изменение сервера доступа



Параметры

RADIUS

Тип

FortiWLC

Имя устройства

IP адрес (NAS-IP-Address)

192.168.97.3

Внешний IP адрес

195.151.100.100

Местоположение

Mercury tower

Комментарий

Вход

admin

Пароль

.....

- ☒ Использовать счетчики аккаунтинга
- ☐ Менять местами счетчики приёма/передачи
- ☐ Определять имена устройств абонентов
- ☐ Принимать детализацию потоков NetFlow

Вкл.

Сбросить сессии

Удалить

Сохранить изменения

Заккрыть

```
radius-profile wnam_radius
description "WNAM Radius server"
ip-address 77.241.xxx.xxx
coa on
radius-timeout 2
radius-retries 3
radius-version 0
key wnam_radius
port 1812
remote-radius-server off
radius-relay-apid 1
mac-delimiter colon
password-type shared-secret
called-station-id-type macaddress-ssid
owner controller
exit
radius-profile wnam_radius_acct
description "WNAM Radius Acct server"
ip-address 77.241.xxx.xxx
coa off
radius-timeout 2
radius-retries 3
radius-version 0
key wnam_radius
port 1813
remote-radius-server off
radius-relay-apid 1
mac-delimiter colon
password-type shared-secret
called-station-id-type macaddress-ssid
owner controller
exit
```



```
security-profile sp_FWC-test
security-version 0
key-rotation disabled
management-frame-protection-11w disable
allowed-l2-modes open
online-sign-up not-configured
captive-portal webauth
captive-portal-profile WNAM-CP
captive-portal-auth-method external
psk key ""
firewall-capability none
passthrough-firewall-filter-id wnam_filter
firewall-filter-id ""
security-logging on
owner controller
static-wep key ""
static-wep key-index 1
captive-portal-bypass-mac
macfiltering
mac-filter-radius-server primary wnam_radius
mac-filter-radius-server secondary ""
mac-filter-acct-radius-server primary wnam_radius_acct
mac-filter-acct-radius-server secondary ""
mac-filter-state disabled
rekey period 0
group-rekey interval 0
bksa-caching-period 0
radius-server primary ""
radius-server secondary ""
auth-supPLICANT-timeout 30
auth-server-timeout 30
auth-max-request 4
pae-max-reauth 4
pae-txperiod 30
eapol-key-retries
no kddi
no shared-authentication
no rekey period
no 8021x-network-initiation
no pmk-caching
no reauth
exit
```

```
gosrule 100 netprotocol 6 qosprotocol other
firewall-filter-id wnam_filter
firewall-filter-id-match on
dstip 77.241.xxx.xxx
dstip-match on
dstmask 255.255.255.255
dstport 80
dstport-match on
srcip 0.0.0.0
srcmask 0.0.0.0
srcport 0
netprotocol-match on
action forward
priority 0
avgpacketrates 0
tokenbucketrate 0
dscp disabled
gosrulelogging off
gosrule-logging-frequency 60
packet-min-length 0
packet-max-length 0
no trafficcontrol
owner controller
exit
gosrule 101 netprotocol 6 qosprotocol other
firewall-filter-id wnam_filter
dstip 0.0.0.0
dstmask 0.0.0.0
dstport 0
srcip 77.241.xxx.xxx
srcip-match on
srcmask 255.255.255.255
srcport 80
action forward
priority 0
avgpacketrates 0
tokenbucketrate 0
dscp disabled
gosrulelogging off
gosrule-logging-frequency 60
packet-min-length 0
packet-max-length 0
no trafficcontrol
owner controller
exit
gosrule 1000 netprotocol 0 qosprotocol other
firewall-filter-id wnam_filter
dstip 0.0.0.0
dstip-match on
dstmask 0.0.0.0
dstport 0
dstport-match on
srcip 0.0.0.0
srcip-match on
srcmask 0.0.0.0
srcport 0
srcport-match on
action drop
priority 0
avgpacketrates 0
tokenbucketrate 0
dscp disabled
gosrulelogging off
gosrule-logging-frequency 60
packet-min-length 0
packet-max-length 0
no trafficcontrol
owner controller
exit
```

```
ssid FWC-test
enable
security-profile sp_FWC-test

captive-portal-exemption-profile 1
fqdn-names http://77.241.xxx.xxx/
description wnam_pass
exit

captive-portal-profile WNAM-CP
port 0
cna-bypass off
radius-profile primary wnam_radius
radius-profile secondary ""
captive-portal-external-url http://77.241.xxx.xxx/cp/fortiwlc
captive-portal-external-ip 195.151.112.84
l3user-session-timeout 1
session-timeout 0
activity-timeout 0
authentication-type radius
accounting-radius-profile primary wnam_radius_acct
accounting-radius-profile secondary ""
accounting-radius-profile interim-interval 60
external-server fortinet-connect
captive-portal-exemption-profile 1
owner controller
exit
captive-portal-global-settings captive-portal-certificate default
captive-portal-global-settings redirection-protocol https
```