

Aruba 6.4

1.2.607 WNAM Aruba (Hewlett Packard Enterprise). Aruba3200 ArubaOS 6.4.2.4.

:

- IP (): 89.11.95.20
- IP (): 172.16.0.1
- IP WNAM: 89.11.95.19
- VLAN : 162
- SSID: aruba

Aruba WNAM , , (SSID VLAN), , . Aruba.

, , Apply.

RADIUS- (WNAM), "Configuration - Security - Authentication" - **wnam_radius**, (- wnam_radius), , :

arubaMOBILITY CONTROLLER 1

DashboardMonitoringConfigurationDiagnosticsMaintenanceSave Configuration

WIZARDSAPControllerCampus WLANRemote APWIPAirWaveNETWORKControllerVLANsPortsCellular ProfileIPSECURITY> AuthenticationAccess ControlWIRELESSAP ConfigurationAP InstallationMANAGEMENTGeneralAdministrationCertificatesSNMPLoggingClockGuest ProvisioningCaptive PortalSMTPBandwidth CalculatorThresholdADVANCED SERVICESRedundancyAirGroupIP MobilityStateful Firewall

Security > Authentication > Servers

ServersAAA ProfilesL2 AuthenticationL3 AuthenticationUser RulesAdvanced

Server Groupdefaultinternalwnam_radius_sgRADIUS Serverwnam_radiusLDAP ServerInternal DBTacacs Accounting ServerTACACS ServerX3ML API ServerRPC 3576 ServerWindows Server

RADIUS Server > wnam_radius

Show ReferenceSave AsReset

Host	89.11.95.19
Key	*****Retype:*****
Auth Port	1812
Acct Port	1813
Retransmits	3
Timeout	5 sec
NAS ID	Aruba
NAS IP	89.11.95.20
Enable IPv6	
NAS IPv6	
Source Interface	vlanidip6addr
Use MDS	
Use IP address for calling station ID	
Mode	
Lowercase MAC addresses	
MAC address delimiter	colon
Service-type of FRAMED-USER	
called-station-id	csid_type macaddrinclude_ssid enablecsid_delimiter colon

NAS IP , , WNAM /etc/freeradius/clients.conf.

wnam_radius_sg :

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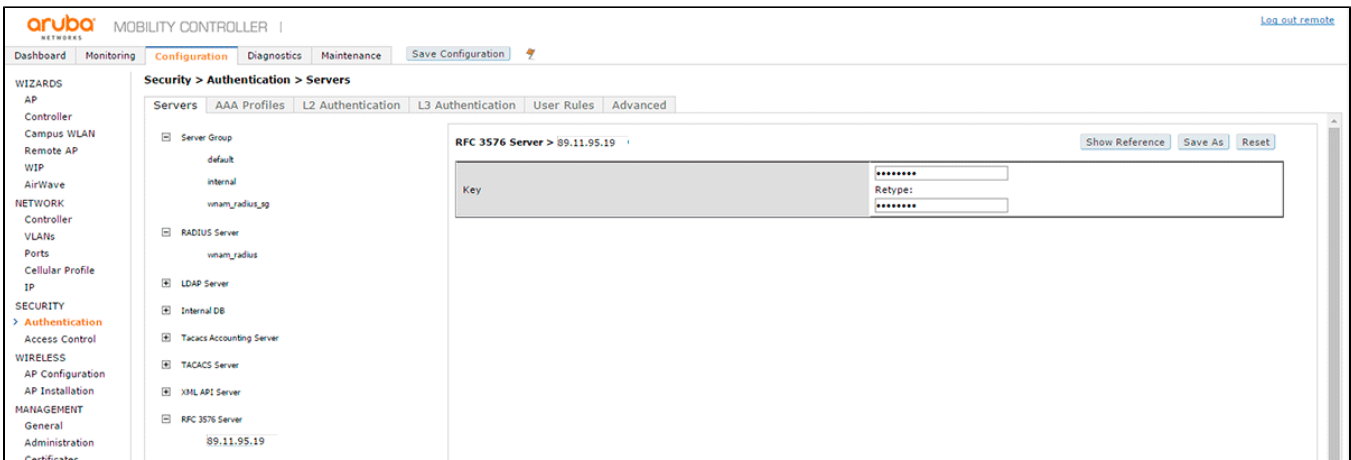
ServersAAA ProfilesL2 AuthenticationL3 AuthenticationUser RulesAdvanced

Server Groupdefaultinternalwnam_radius_sgRADIUS Serverwnam_radiusLDAP Server

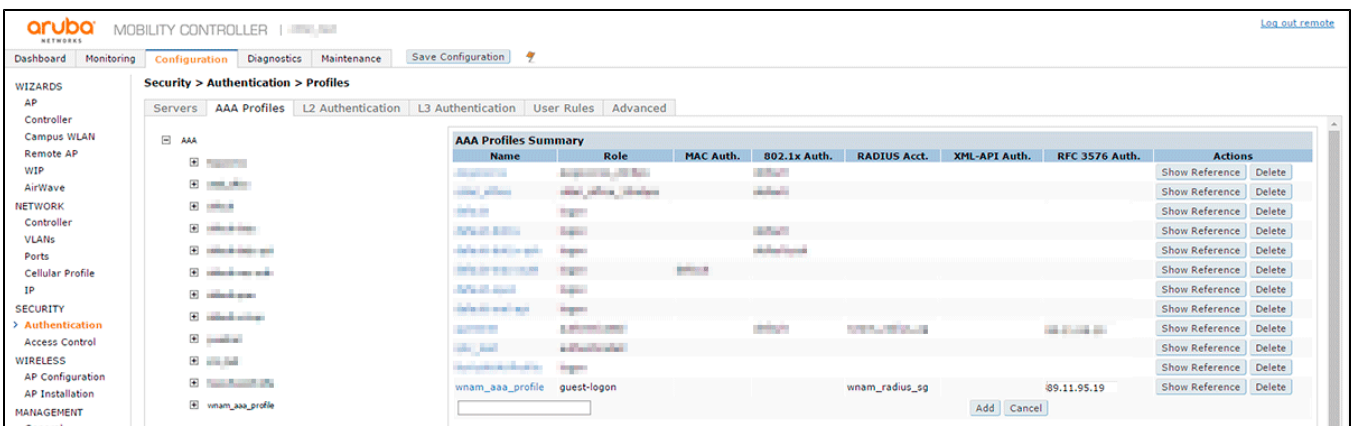
Server Group

Instance	Servers out of Service	Actions
default		Show ReferenceDelete
internal		Show ReferenceDelete
wnam_radius_sg		Show ReferenceDelete
		Add

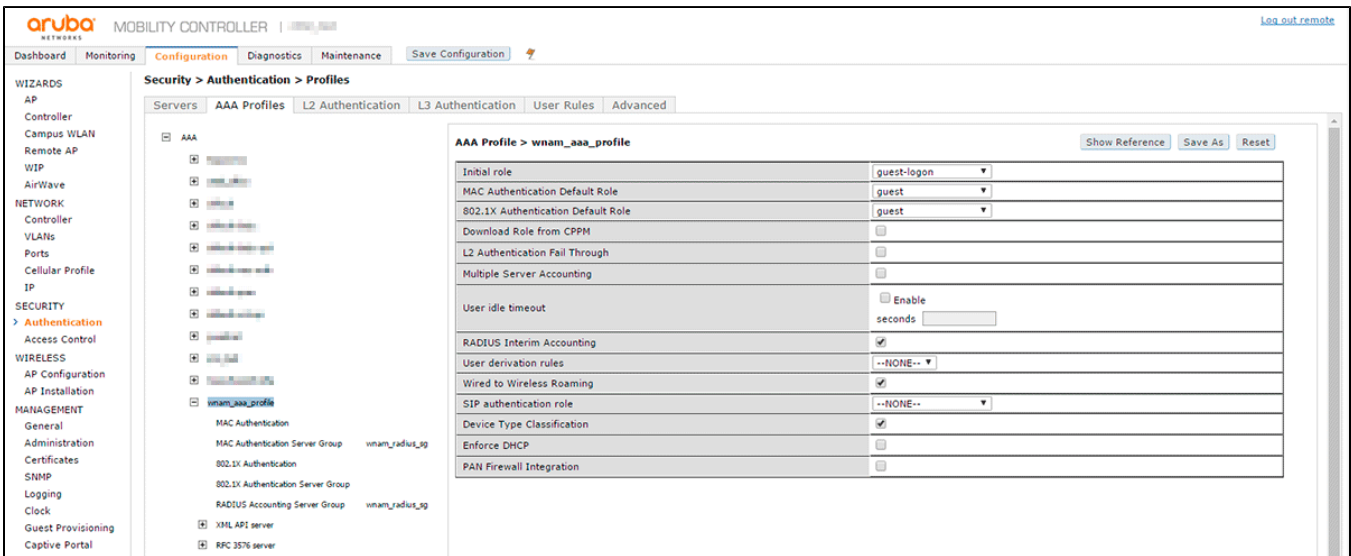
RFC3567, :



"AAA Profiles" , wnam_aaa_profile.



"Initial role". " " . Interim Accounting:



- wnam_radius_sg :

aruba MOBIILITY CONTROLLER | [Log out remote](#)

Dashboard Monitoring **Configuration** Diagnostics Maintenance Save Configuration

WIZARDS
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Clock
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Captive Portal

Security > Authentication > Profiles

Servers AAA Profiles L2 Authentication L3 Authentication User Rules Advanced

AAA

RADIUS Accounting Server Group > wnam_radius_sg

Fail Through N/A
Load Balance default

internal
wnam_radius_sg
--NEW--

Show Reference Save As Reset

Name	Server-Type	trim-FQDN	Match-Rule
wnam_radius	Radius	No	

New Delete

Priority	Attribute	Operation	Operand	Type	Action	Value	Validated
New							

New Delete

MAC Authentication
MAC Authentication Server Group wnam_radius_sg
802.1X Authentication
802.1X Authentication Server Group
RADIUS Accounting Server Group wnam_radius_sg
XML API server
RFC 3576 server

"L3 Authentication". wnam_captive_portal:

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Security > Authentication > L3 Authentication

Servers AAA Profiles L2 Authentication L3 Authentication User Rules Advanced

Captive Portal Authentication

WSPR Authentication
VPN Authentication
Stateful NTLM Authentication
Stateful Kerberos Authentication
VSA Authentication
VSA Connection
VSA Web Authentication

wnam_captive_portal

Captive Portal Authentication Profile

Instance	Actions
wnam_captive_portal	Show Reference Delete
wnam_captive_portal	Show Reference Delete
wnam_captive_portal	Show Reference Delete
wnam_captive_portal	Show Reference Delete
wnam_captive_portal	Show Reference Delete

Add

Login page , WNAM, : <http://89.11.95.19/cp/aruba>

Welcome page (). (White list) wnam_destination.

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Captive Portal
SMTP
Bandwidth Calculator
Threshold
ADVANCED SERVICES
Redundancy
AirGroup
IP Mobility
Stateful Firewall
Threshold
ADVANCED SERVICES
Redundancy
AirGroup
IP Mobility
Stateful Firewall
External Services
VPN Services
Wired Access
All Profiles
[E-mail Support](#)

Security > Authentication > L3 Authentication

Servers AAA Profiles L2 Authentication **L3 Authentication** User Rules Advanced

Captive Portal Authentication

- cp-preview
- cp_test_cp_prof
- default
- guestnet
- wnam_captive_portal**

Server Group: wnam_radius_gp

Captive Portal Authentication Profile > wnam_captive_portal [Show Reference](#) [Save As](#) [Reset](#)

Default Role	guest
Default Guest Role	guest
Redirect Pause	10 sec
User Login	☒
Guest Login	☒
Logout popup window	☐
Use HTTP for authentication	☒
Logon wait minimum wait	5 sec
Logon wait maximum wait	10 sec
Logon wait CPU utilization threshold	60 %
Max Authentication failures	0
Show FQDN	☐
Authentication Protocol	PAP
Login page	http://89.11.95.19/cp/arub
Welcome page	http://89.11.95.19/cp/arub
Show Welcome Page	☐
Add switch IP address in the redirection URL	☒
Adding user vlan in redirection URL	☒
Add a controller interface in the redirection URL	address 89.11.95.20
Allow only one active user session	☐
White List	wnam_destination Delete ipv6-reserved-range Add
Black List	Delete ipv6-reserved-range Add
Show the acceptable use policy page	☐
User idle timeout	seconds
Redirect URL	
Bypass Apple Captive Network Assistant	☒
URL Hash Key	Retype:

Commands [Apply](#) [View Commands](#)

(Interim stats). IP , RADIUS- NAS-IP-Address. WNAM (172.16.0.1):

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WIRELESS
AP Configuration
AP Installation

Security > Authentication > Advanced

Servers AAA Profiles L2 Authentication L3 Authentication User Rules **Advanced**

Authentication Timers

User Idle Timeout	300 sec
Authentication Server Dead Time (min)	10
Logon User Lifetime (min)	5
User Interim stats frequency	600 sec

RADIUS Client

NAS IPv4 Address	172.16.0.1
Source Interface v4	<-- None
NAS IPv6 Address	::1
Source Interface v6	<-- None

DNS Query Interval

DNS Query Interval (min)	15
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[Apply](#)

"Configuration - Security - Access control". **guest-logout**:

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Dashboard Monitoring **Configuration** Diagnostics Maintenance [Save Configuration](#)

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 Guest Provisioning
 Captive Portal
 SMT
 Bandwidth Calculator
 Threshold

Configuration > AP Group > Edit "guestnet"

Profiles	Profile Details
Wireless LAN	AAA Profile > wnam_aaa_profile Show Reference
Virtual AP	
guestnet	
AAA	Initial role: guest-logout
802.11K	MAC Authentication Default Role: guest
Hotspot 2.0	802.1X Authentication Default Role: guest
SSID	Download Role from CPM: ☐
EDCA Parameters Station	L2 Authentication Fail Through: ☐
EDCA Parameters AP	Multiple Server Accounting: ☐
High-throughput SSID	User idle timeout: ☐ Enable
802.11r	seconds:
WM Traffic Management	RADIUS Interim Accounting: ☒
	User derivation rules: --NONE--
	Wired to Wireless Roaming: ☒
	SIP authentication role: --NONE--
	Device Type Classification: ☒
	Enforce DHCP: ☐
	PAN Firewall Integration: ☐
	MAC Authentication Profile: wnam_radius_sg
	MAC Authentication Server Group: wnam_radius_sg
	802.1X Authentication Profile: wnam_radius_sg
	802.1X Authentication Server Group: wnam_radius_sg
	RADIUS Accounting Server Group: wnam_radius_sg
	XML API server: 89.11.95.19
	RFC 3576 server: 89.11.95.19

Aruba .

WNAM Aruba, IP-, NAS-IP-Address RADIUS- . - Aruba (DHCP-), NetFlow.

Изменение сервера

Тип
 Aruba

IP адрес
 172.16.0.1

Местоположение
 Aruba LAB_A

Логин

Пароль

☒ Использовать счетчики аккаунтинга
☐ Определять имена абонентов
☐ Принимать детализацию потоков NetFlow

Сбросить сессии Удалить Сохранить изменения Закрыть

```
ip access-list standard wnam_whitelist
permit host 89.11.95.19
```

```
netdestination wnam_destination
host 89.11.95.19

ip access-list session wnam_access
user host 89.11.95.19 svc-http permit

user-role guest-logon
captive-portal "wnam_captive_portal"
access-list session ra-guard
access-list session logon-control
access-list session captiveportal
access-list session v6-logon-control
access-list session captiveportal6

user-role guest
access-list session global-sacl
access-list session apprf-guest-sacl
access-list session ra-guard
access-list session http-acl
access-list session https-acl
access-list session dhcp-acl
access-list session icmp-acl
access-list session dns-acl
access-list session v6-http-acl
access-list session v6-https-acl
access-list session v6-dhcp-acl
access-list session v6-icmp-acl
access-list session v6-dns-acl
access-list session wnam_access

aaa rfc-3576-server "89.11.95.19"
key XXX

aaa authentication mac "wnam_mac_authprofile"
delimiter colon
case upper

aaa authentication-server radius "wnam_radius"
host "89.11.95.19"
key XXX
nas-identifier "Aruba"
nas-ip 89.11.95.20
mac-delimiter colon
called-station-id type macaddr include-ssid enable delimiter colon

aaa server-group "wnam_radius_sg"
auth-server wnam_radius

aaa profile "wnam_aaa_profile"
initial-role "guest-logon"
mac-server-group "wnam_radius_sg"
radius-accounting "wnam_radius_sg"
radius-interim-accounting
rfc-3576-server "89.11.95.19"

aaa authentication captive-portal "wnam_captive_portal"
server-group "wnam_radius_sg"
guest-logon
no logout-popup-window
protocol-http
login-page "http://89.11.95.19/cp/aruba"
welcome-page "http://89.11.95.19/cp/aruba?welcome"
no enable-welcome-page
switchip-in-redirection-url
user-vlan-in-redirection-url
ip-addr-in-redirection-url "89.11.95.20"
white-list "wnam_destination"
apple-cna-bypass
```



```
wlan virtual-ap "guestnet"  
  aaa-profile "wnam_aaa_profile"  
  ssid-profile "cittel-aruba"  
  vlan 162  
  band-steering  
  broadcast-filter all  
  deny-inter-user-traffic  
  dos-prevention  
  wmm-traffic-management-profile "wnm"  
!  
  
ap-group "guestnet"  
  virtual-ap "guestnet"
```