



## RADIUS VSA

---

- [Information About RADIUS VSA, on page 1](#)
- [Create an Attribute List, on page 2](#)
- [Create a AAA Policy and Map it to Attribute List, on page 3](#)
- [Map a AAA Policy to the WLAN Policy Profile, on page 4](#)
- [Map the WLAN Policy Profile to a WLAN, on page 5](#)

### Information About RADIUS VSA

The Internet Engineering Task Force (IETF) draft standard specifies a method for communicating vendor-specific information between the network access server and the RADIUS server by using vendor specific attributes (VSA). VSA allow vendors to support their own extended attributes otherwise not suitable for general use. The controller uses these attributes value in authentication or accounting packets, or both based on specified usage format.

VSA contains these three elements:

- Type
- Length
- String (also known as data)
  - Vendor-ID
  - Vendor-Type
  - Vendor-Length
  - Vendor-Data

This feature is supported only in FlexConnect central authentication mode with local switching. FlexConnect local authentication mode is not supported.

This feature is supported only for wireless sessions.

This feature supports the following set of VSAs per WLAN for authentication and accounting requests, in addition to the existing AAA attributes.

Table 1: Newly Supported Attributes

Attribute Name	Well-known Attribute	VSA Sub-attribute	Vendor ID
SVR-Zip-Code	26	14	14369
SVR-Device-Type	26	17	14369
SVR-Device-Model-Number	26	18	14369
SVR-Lat-Long	26	19	14369
SVR-Venue-Category	26	20	14369
SVR-Network-Type	26	21	14369
Aggregation-AAA	26	22	14369
BW-Venue-Id	26	7	22472
BW-Venue-TZ	26	8	22472
BW-Class	26	10	22472
BW-Venue-Description	26	11	22472
BW-ISO-Country-Code	26	14	22472
BW-E164-Country-Code	26	15	22472
BW-State-Name	26	16	22472
BW-City-Name	26	17	22472
BW-Area-Code	26	18	22472
BW-User-Group	26	27	22472
BW-Venue-Name	26	29	22472
BW-Operator-Name	26	37	22472

## Create an Attribute List

### Procedure

	Command or Action	Purpose
<b>Step 1</b>	<b>configure terminal</b> <b>Example:</b> Device# configure terminal	Enters global configuration mode.

	Command or Action	Purpose
<b>Step 2</b>	<b>aaa attribute list</b> <i>list</i> <b>Example:</b> Device(config)# aaa attribute list TEST	Creates a AAA attribute list.
<b>Step 3</b>	<b>attribute type</b> <i>attribute-type</i> <b>Example:</b> Device(config-attr-list)# attribute type BW-City-Name "MUMBAI"	Specifies a AAA attribute type.
<b>Step 4</b>	<b>attribute type</b> <i>attribute-type</i> <b>Example:</b> Device(config-attr-list)# attribute type BW-State-Name "MAHARASHTRA"	(Optional) Specifies a AAA attribute type.
<b>Step 5</b>	<b>attribute type</b> <i>attribute-type</i> <b>Example:</b> Device(config-attr-list)#attribute type BW-Venue-Name "WANKHEDE"	(Optional) Specifies a AAA attribute type.
<b>Step 6</b>	<b>end</b> <b>Example:</b> Device(config-attr-list)# end	Returns to Privileged EXEC mode.

**What to do next**

Create a AAA policy and map the attribute list.

## Create a AAA Policy and Map it to Attribute List

**Procedure**

	Command or Action	Purpose
<b>Step 1</b>	<b>configure terminal</b> <b>Example:</b> Device# configure terminal	Enters global configuration mode.
<b>Step 2</b>	<b>wireless aaa policy</b> <i>aaa-policy</i> <b>Example:</b> Device(config)# wireless aaa policy policy-1	Creates a new AAA policy.
<b>Step 3</b>	<b>attrlist authentication</b> <i>authentication-attr-list</i> <b>Example:</b>	Configures VSA authentication attribute list.

	Command or Action	Purpose
	Device(config-aaa-policy)# attrlist authentication auth-attr-list	
<b>Step 4</b>	<b>attrlist accounting</b> <i>accounting-attr-list</i> <b>Example:</b> Device(config-aaa-policy)# attrlist accounting acct-attr-list	Configures VSA accounting attribute list.
<b>Step 5</b>	<b>end</b> <b>Example:</b> Device(config-aaa-policy)# end	Returns to Privileged EXEC mode.

**What to do next**

Map the AAA policy to the WLAN policy profile.

## Map a AAA Policy to the WLAN Policy Profile

**Procedure**

	Command or Action	Purpose
<b>Step 1</b>	<b>configure terminal</b> <b>Example:</b> Device# configure terminal	Enters global configuration mode.
<b>Step 2</b>	<b>wireless profile policy</b> <i>profile-policy</i> <b>Example:</b> Device(config)# wireless profile policy EAP-AKA	Creates a new wireless policy profile.
<b>Step 3</b>	<b>aaa-policy</b> <i>aaa-policy</i> <b>Example:</b> Device(config-wireless-policy)# aaa-policy Verizon-aaa-policy	Creates a new AAA policy.
<b>Step 4</b>	<b>end</b> <b>Example:</b> Device(config-wireless-policy)# end	Returns to Privileged EXEC mode.

**What to do next**

Map the WLAN policy profile to a WLAN.

## Map the WLAN Policy Profile to a WLAN

### Procedure

	Command or Action	Purpose
<b>Step 1</b>	<b>configure terminal</b> <b>Example:</b> Device# configure terminal	Enters global configuration mode.
<b>Step 2</b>	<b>wireless tag policy <i>policy-name</i></b> <b>Example:</b> Device(config)# wireless tag policy EAP-AKA	Creates a new policy tag.
<b>Step 3</b>	<b>wlan <i>wlan-profile-name</i> policy <i>aaa-policy</i></b> <b>Example:</b> Device(config-policy-tag)# wlan EAP-AKA policy EAP-AKA	Maps the policy profile to a WLAN.
<b>Step 4</b>	<b>end</b> <b>Example:</b> Device(config-policy-tag)# end	Returns to Privileged EXEC mode.

