RADIUS VSA

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
Step 1	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.

	Command or Action	Purpose
Step 2	**aaa attribute list** *list* **Example:** `Device(config)# aaa attribute list TEST`	Creates a AAA attribute list.
Step 3	**attribute type** *attribute-type* **Example:** `Device(config-attr-list)# attribute type BW-City-Name "MUMBAI"`	Specifies a AAA attribute type.
Step 4	**attribute type** *attribute-type* **Example:** `Device(config-attr-list)# attribute type BW-State-Name "MAHARASHTRA`	(Optional) Specifies a AAA attribute type.
Step 5	**attribute type** *attribute-type* **Example:** `Device(config-attr-list)#attribute type BW-Venue-Name "WANKHEDE"`	(Optional) Specifies a AAA attribute type.
Step 6	**end** **Example:** `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
Step 1	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.
Step 2	**wireless aaa policy** *aaa-policy* **Example:** `Device(config)# wireless aaa policy policy-1`	Creates a new AAA policy.
Step 3	**attrlist authentication** *authentication-attr-list* **Example:**	Configures VSA authentication attribute list.

	Command or Action	**Purpose**
	`Device(config-aaa-policy)# attrlist authentication auth-attr-list`	
Step 4	**attrlist accounting** *accounting-attr-list* **Example:** `Device(config-aaa-policy)# attrlist accounting acct-attr-list`	Configures VSA accounting attribute list.
Step 5	**end** **Example:** `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**
Step 1	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.
Step 2	**wireless profile policy** *profile-policy* **Example:** `Device(config)# wireless profile policy EAP-AKA`	Creates a new wireless policy profile.
Step 3	**aaa-policy** *aaa-policy* **Example:** `Device(config-wireless-policy)# aaa-policy Verizon-aaa-policy`	Creates a new AAA policy.
Step 4	**end** **Example:** `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
Step 1	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.

Step 2	**wireless tag policy** *policy-name*
	
	Example:
	
	`Device(config)# wireless tag policy`
	`EAP-AKA`
		Creates a new policy tag.

Step 3	**wlan** *wlan-profile-name* **policy** *aaa-policy*
	
	Example:
	
	`Device(config-policy-tag)# wlan EAP-AKA`
	` policy EAP-AKA`
		Maps the policy profile to a WLAN.

Step 4	**end** **Example:** `Device(config-policy-tag)# end`	Returns to Privileged EXEC mode.