



RADIUS VSA

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RADIUS VSA

A RADIUS VSA is a vendor-specific attribute used in RADIUS implementations that

- allows vendors to communicate specialized information between a network access server and a RADIUS server
- enables support for attributes not defined by standard RADIUS specifications, and
- is included in authentication or accounting packets, or both, according to implementation needs.

The main elements of the VSA are:

- Type: Identifies the attribute type.
- Length: Indicates attribute length.
- String (Data): Contains vendor-specific data, which includes:
 - Vendor ID
 - Vendor type
 - Vendor length
 - Vendor data

Supported modes and attributes

Authentication and accounting requests per WLAN support these VSAs 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



Note You can use this feature only in FlexConnect central authentication mode with local switching. FlexConnect local authentication mode is not supported. Use this feature for wireless sessions only.

Create an attribute list

Create a custom AAA attribute list for use in policy mapping.

Procedure

Step 1 Enter global configuration mode.

Example:

```
Device# configure terminal
```

Step 2 Create a AAA attribute list.

Example:

```
Device(config)# aaa attribute list attribute-list
```

Step 3 Specify a AAA attribute type.

Example:

```
Device(config-attr-list)# attribute type attribute-type  
Device(config-attr-list)# attribute type BW-City-Name "MUMBAI"
```

Step 4 (Optional) Specify a AAA attribute type such as the state name.

Example:

```
Device(config-attr-list)# attribute type BW-State-Name "MAHARASHTRA"
```

Step 5 (Optional) Specify a AAA attribute type such as the venue name.

Example:

```
Device(config-attr-list)#attribute type BW-Venue-Name "WANKHEDE"
```

Step 6 Return to Privileged EXEC mode.

Example:

```
Device(config-attr-list)# end
```

After you create the AAA attribute list, you can use it in policy mapping.

What to do next

Create a AAA policy and map the attribute list.

Create a AAA policy and map it to attribute list

Set up an AAA policy to enable secure wireless access control. Associate authentication and accounting attribute lists with the policy.

Procedure

Step 1 Enter global configuration mode.

Example:

```
Device# configure terminal
```

Step 2 Create a new AAA policy.

Example:

```
Device(config)# wireless aaa policy aaa-policy
```

Step 3 Configure VSA authentication attribute list.

Example:

```
Device(config-aaa-policy)# attrlist authentication authentication-attr-list
```

Step 4 Configure VSA accounting attribute list.

Example:

```
Device(config-aaa-policy)# attrlist accounting accounting-attr-list
```

Step 5 Return to Privileged EXEC mode.

Example:

```
Device(config-aaa-policy)# end
```

You have set up the AAA policy and linked it to the specified attribute lists. You can now map it to a WLAN policy profile.

What to do next

To activate the AAA policy, map it to the WLAN policy profile.

Map a AAA policy to WLAN policy profile

Associate a AAA policy with a WLAN policy profile. This enforces authentication and authorization rules on wireless clients.

Procedure

Step 1 Enter global configuration mode.

Example:

```
Device# configure terminal
```

Step 2 Create a new wireless policy profile.

Example:

```
Device(config)# wireless profile policy EAP-AKA profile-policy
```

Step 3 Create a new AAA policy.

Example:

```
Device(config-wireless-policy)# aaa-policy Verizon-aaa-policy aaa-policy
```

Step 4 Return to Privileged EXEC mode.

Example:

```
Device(config-wireless-policy)# end
```

You have mapped the AAA policy to the WLAN policy profile.

What to do next

Map the WLAN policy profile to a WLAN.

Map the WLAN policy profile to a WLAN

Associate a previously configured WLAN policy profile to a WLAN on a Cisco device.

Procedure

Step 1 Enter global configuration mode.

Example:

```
Device# configure terminal
```

Step 2 Create a new policy tag.

Example:

```
Device(config)# wireless tag policy policy-name
```

Step 3 Map the policy profile to a WLAN.

Example:

```
Device(config-policy-tag)# wlan wlan-profile-name policy aaa-policy
```

Step 4 Return to Privileged EXEC mode.

Example:

```
Device(config-policy-tag)# end
```

The specified WLAN policy profile is successfully mapped to the WLAN.

```
Device# configure terminal
Device(config)# wireless tag policy EAP-AKA
Device(config-policy-tag)# wlan EAP-AKA policy EAP-AKA
Device(config-policy-tag)# end
```

