RBAC Configuration Guide

Configuration for APC System

Disclaimer

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- RBAC for Remote AP
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RBAC Configuration

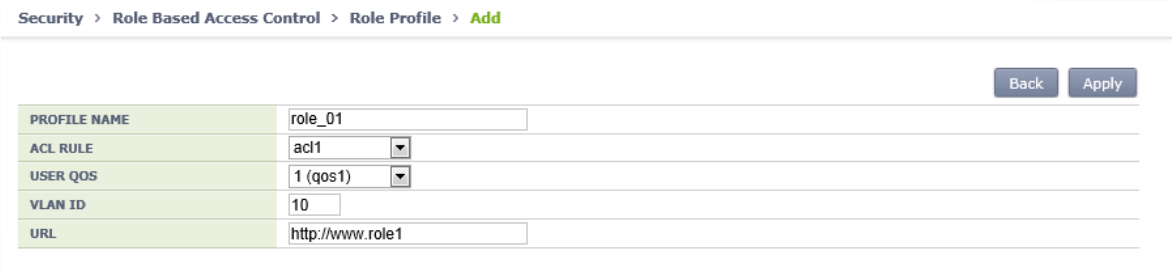
- Role Based Access Control is can different service for users
- Service define for below items
  - Acl (IP Acl)
  - User QoS (Bandwidth Contract)
  - Vlan interface
  - Redirect Url

- Step 0-1) ACL config
  - Refer to IP Acl configuration
- Step 0-2) QoS config
  - Refer to User QoS configuration
- Step 1) Make Role Profile
- Step 2) Make Derivation Profile
- Step 3) Configuration for derivation - 802.1x user

Step 1) Make Role Profile – WEC

- Configuration > Security > Role Based Access Control > Role Profile
  - Role Profile Configuration

  - Role Profile Add Configuration



Step 1) Make Role Profile – CLI

- Role profile config

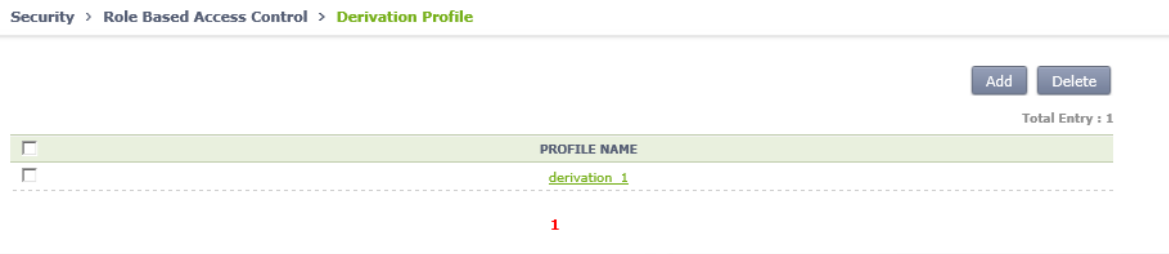
```
WEC8500# configure terminal
WEC8500/configure# rbac
WEC8500/configure/rbac# role-profile role_01
WEC8500/configure/rbac/role-profile role_01# acl acl1
WEC8500/configure/rbac/role-profile role_01# qos 1
WEC8500/configure/rbac/role-profile role_01# vlan 10
WEC8500/configure/rbac/role-profile role_01# url http://www.role1
WEC8500/configure/rbac/role- profile role_01#
```

- Role profile show

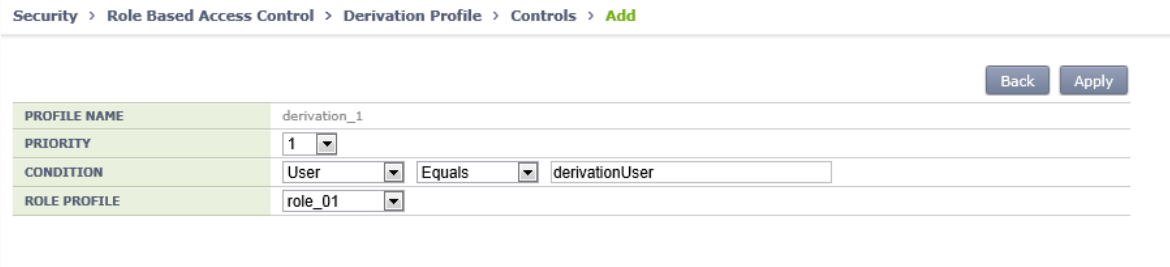
```
WEC8500# show rbac role-profile summary

===== Role Profile Summary =====

Id ProfileName Acl        Qos Vlan Url
== =========== ========== === ==== ====================
1  role_01     acl1       1   10   http://www.role1
```

Step 2) Make Derivation Profile – WEC

- Configuration > Security > Role Based Access Control > Derivation Profile
  - Derivation Profile Configuration



  - Derivation Profile Add Configuration
    - Ex) config to condition for user , "start-with" , "samsung", and "role_samsung"
      samsung1, samsung2, samsung2 user assign to "role_samsung"



Step 3) Make Derivation Profile – CLI

- Derivation profile config

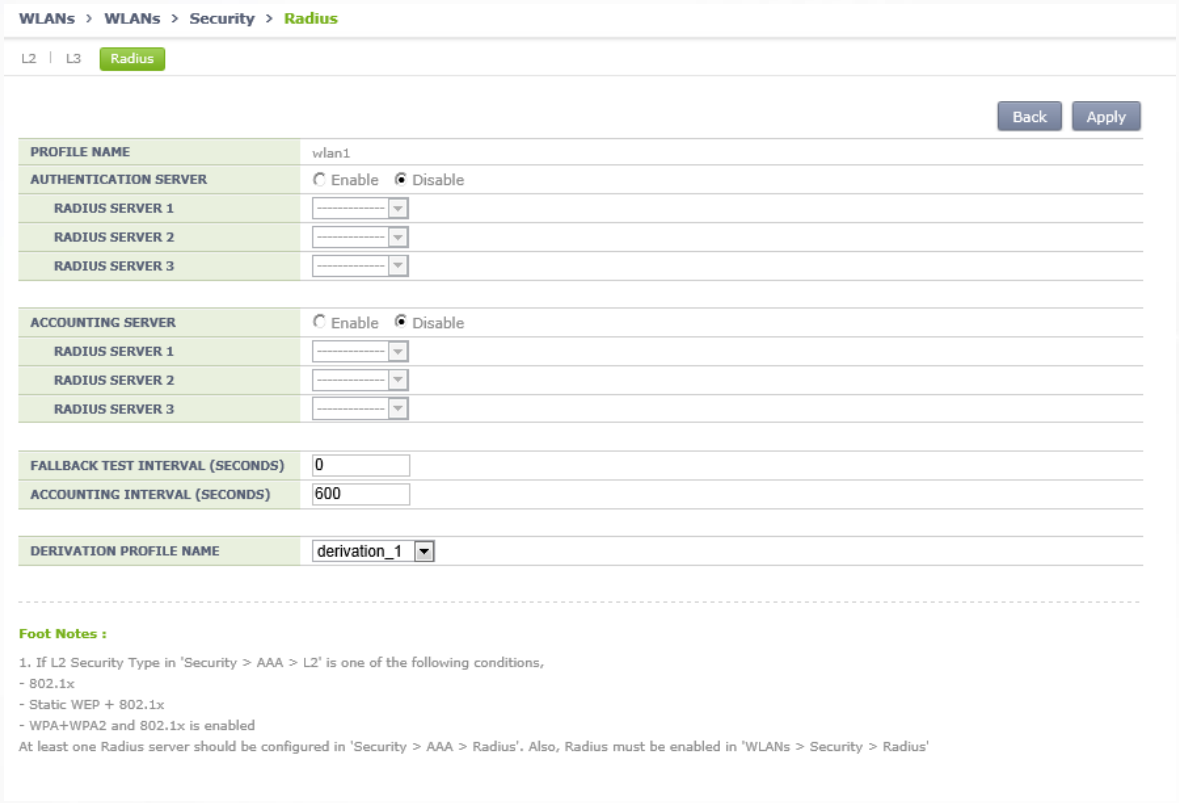
```
WEC8500# configure terminal
WEC8500/configure# rbac
WEC8500/configure/rbac# derivation-profile derivation_1
WEC8500/configure/rbac/derivation-profile derivation_1# condition priority 11 user equal derivationUser role role_1
WEC8500/configure/rbac/derivation-profile derivation_1# condition priority 12 user start-with derivation role role_2
WEC8500/configure/rbac/derivation-profile derivation_1# condition priority 13 user contain vation role role_3
WEC8500/configure/rbac/derivation-profile derivation_1# condition priority 14 user end-with User role role_4
WEC8500/configure/rbac/derivation-profile derivation_1# condition priority 15 user not-equal samsung role role_5
WEC8500/configure/rbac/derivation-profile derivation_1# exit
```

- Derivation profile show

```
WEC8500# show rbac derivation-profile summary

derivation-profile derivation_1
 condition priority 11 user equal derivationUser role role_1
 condition priority 12 user start-with derivation role role_2
 condition priority 13 user contain vation role role_3
 condition priority 14 user end-with User role role_4
 condition priority 15 user not-equal samsung role role_5
```

Step 3) Config for derivation (802.1x user) – WEC

- Configuration > WLANs > Security > Radius
  - Wlan Derivation Profile configuration



Step 3) Config for derivation (802.1x user) – CLI

- Derivation config for Wlan

```
WEC8500# configure terminal
WEC8500/configure# wlan 1
WEC8500/configure/wlan 1# derivation-profile ieee8021x derivation_1
WEC8500/configure/wlan 1# end
```

- Derivation show for Wlan

```
WEC8500# show rbac wlan-derivation-config

================ RbacDerivationConfigForWlan ================

WlanId Owner            DerivationProfileId
====== ================ ===================
1      Global           0
1      Open             0
1      Radius           1
1      CaptivePotal     0
```

RBAC for Remote AP

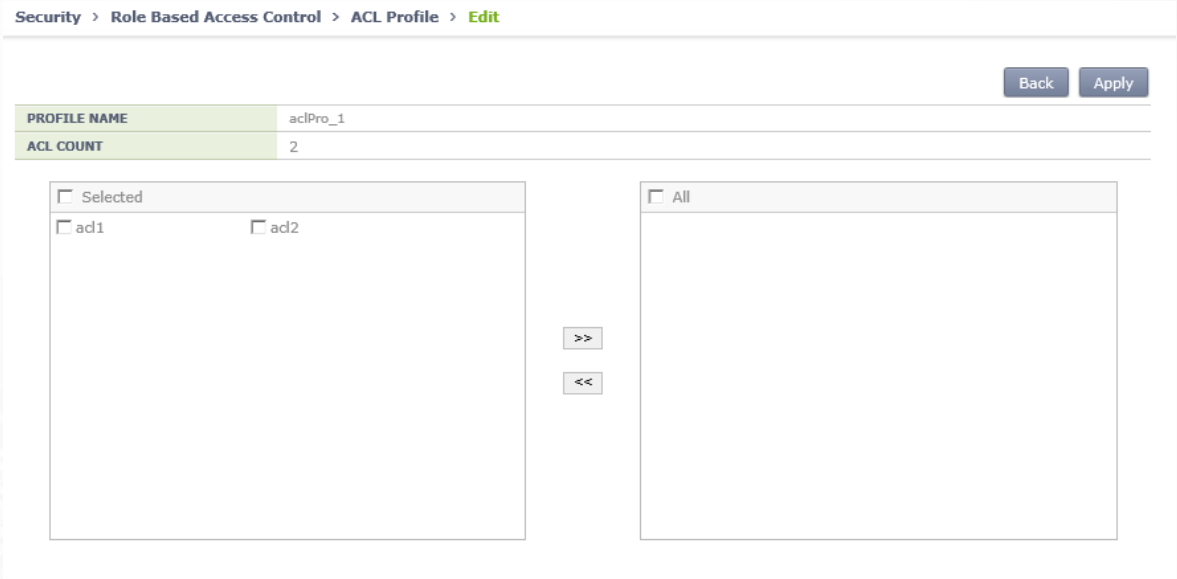
- Acl Profile define using ACL in Remote AP
- If Wlan tunnel mode is Local bridging, should be config ACL profile for RBAC ACL service.

- Step 0) RBAC configuration
  - Refer to RBAC configuration
- Step 1) Make Acl Profile
- Step 2) Config Acl Profile
- Step 3) Apply to remote APs

Step 1) Make Acl Profile – WEC

- Configuration > Security > Role Based Access Control > Acl Profile
  - Acl Profile Configuration

  - Acl Profile Add Acl



Step 1) Make Acl Profile – CLI

- Acl profile config

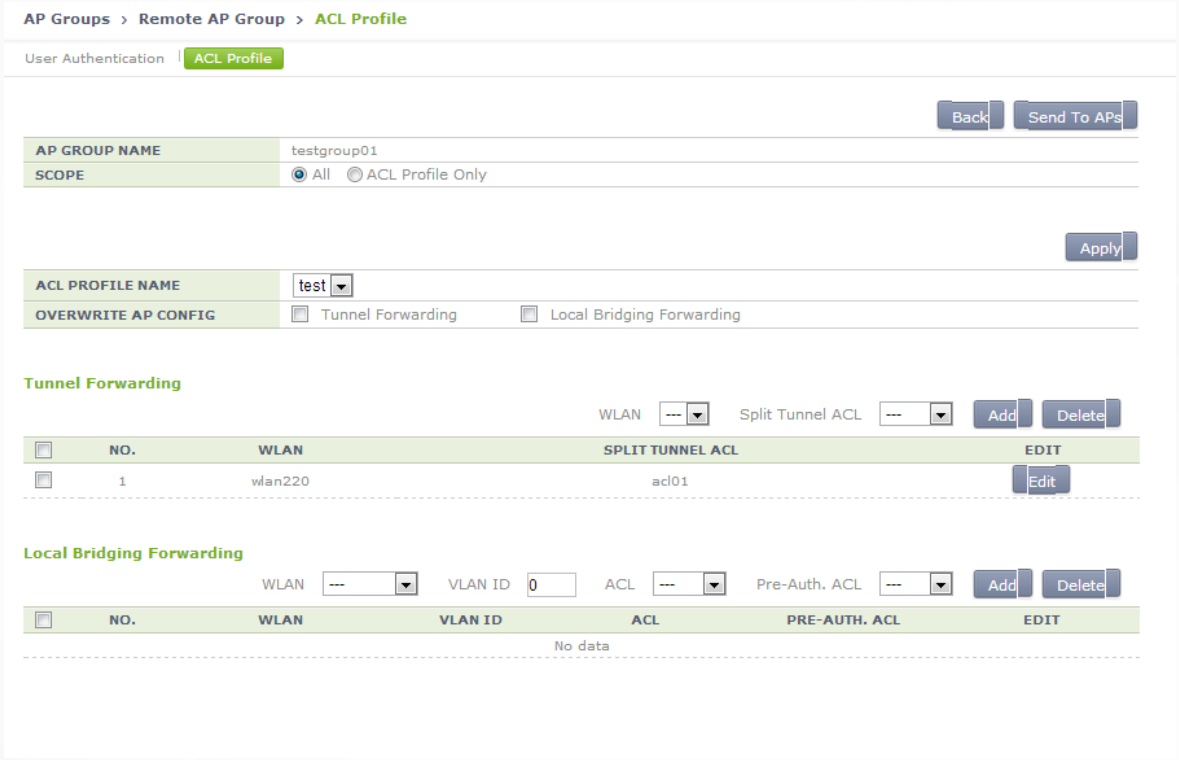
```
WEC8500# configure terminal
WEC8500/configure# rbac
WEC8500/configure/rbac# acl-profile aclPro_1
WEC8500/configure/rbac/acl-profile aclPro_1# add-acl acl1
WEC8500/configure/rbac/acl-profile aclPro_1# add-acl acl2
WEC8500/configure/rbac/acl-profile aclPro_1# exit
WEC8500/configure/rbac# acl-profile aclPro_2
WEC8500/configure/rbac/acl-profile aclPro_2# end
```

- Acl profile show

```
WEC8500# show rbac acl-profile summary

================ LocalSwAclProfile ================

Id ProfileName TotalRuleCnt AclCnt RmtCnt
== =========== ============ ====== ======
1    aclPro_1    2          2      0


WEC8050# show rbac remote acl-profile detail aclPro_1


===== Local Switch IP Acl Profile detail =====

ID : 1
ACL Profeil Name : aclPro_1
Total Rule Count : 2
ACL List : Count (2)
     acl1(1), acl2(2)
```

Step 2) Config Acl Profile – WEC

- Configuration > AP Groups > Remote AP Group > ACL Profile
  - ACL PROFILE Configuration



Step 2) Config Acl Profile – CLI

- Acl profile config to Remote Ap Group

```
WEC8500# configure terminal
WEC8500/configure# ap-group apg_1
WEC8500/configure/ap-group apg_1# remote
WEC8500/configure/ap-group apg_1/remote# acl-profile aclPro_1
WEC8500/configure/ap-group apg_1/remote# end
```

- Acl profile show with Remote Ap Group

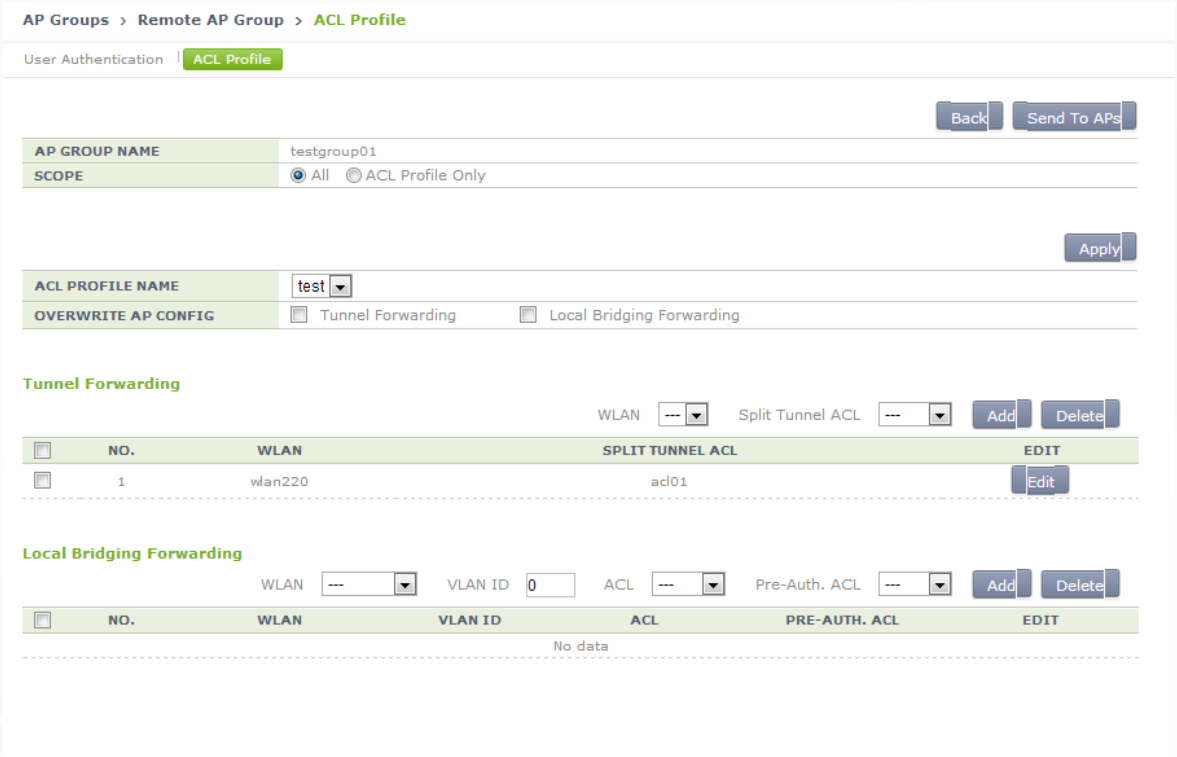
```
WEC8500# show rbac remote-group summary


 GRP_ID      GRP_NAME   PRO_ID     Role Config File Name
 ======   ========   ======  ============================
2             apg_1          1         etc/rmtapgrp/rbac_cfg_rmtapgrp2_XXXX.tar
```

Step 3) Apply to remote APs – WEC(1)

- Configuration > Security > Role Based Access Control > ACL Profile
  - Send To All Remote APs

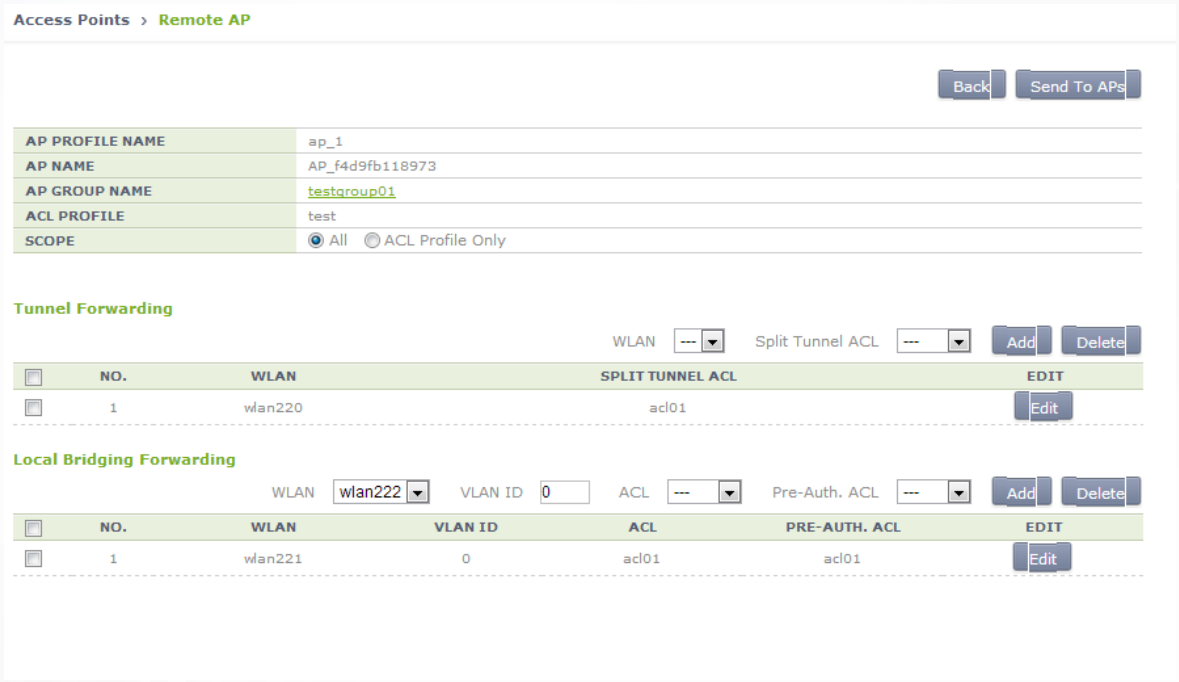
Step 3) Apply to remote APs – WEC(2)

- Configuration > AP Groups > Remote AP Group > ACL Profile
  - Send To Aps for Remote Group
    - All : ACL profile send + ACL config(Tunnel + Local Bridging Forwarding)
    - ACL Profile Only : ACL profile send only



Step 3) Apply to remote APs – WEC(3)

- Configuration > Access Points> Remote AP > ACL Profile
  - Send To Ap
    - All : ACL profile send + ACL config(Tunnel + Local Bridging Forwarding)
    - ACL Profile Only : ACL profile send only



Step 3) Apply to remote APs – CLI

- Acl Profile Send to Aps
  - All : send to all remote group Aps.
  - Acl-profile : send to APs for selected acl profile (cli only).
  - Remote-ap-group : send to APs for selected remote group.
  - Ap : send to AP for selected remote ap.

```
WEC8500# configure terminal
WEC8500/configure# rbac
WEC8500/configure/rbac# sync-config
WEC8500/configure/rbac/sync-config# all
WEC8500/configure/rbac/sync-config# acl-profile aclPro_1
WEC8500/configure/rbac/sync-config# remote-ap-group apg_1
WEC8500/configure/rbac/sync-config# ap ap_1
```

RBAC Features on Samsung APC

Version	Target	Configuration in Radius Server	Condition in Derivation Profile	Configuration in Role Profile	Role-Based User Service
v2.3.8	-802.1x user	-ACL -QoS -VLAN	N/A	N/A	-ACL -QoS -VLAN
		-Role Profile	N/A	-ACL -QoS -VLAN	-ACL -QoS -VLAN
v2.4.12	-802.1x user	-ACL -QoS -VLAN -URL	N/A	N/A	-ACL -QoS -VLAN -URL
		-Role Profile -Filter-Id	N/A	-ACL -QoS -VLAN -URL	-ACL -QoS -VLAN -URL
		None	-User-Id (Start with / End with / Contains / Equals / Not equals)		
v3.0 (plan)	-802.1x user	-ACL -QoS -VLAN -URL	N/A	N/A	-ACL -QoS -VLAN -URL
		-Role Profile -Filter-Id	N/A	-ACL -QoS -VLAN -URL -DPI	-ACL -QoS -VLAN -URL -DPI
	-802.1x user -Web Auth user	None	-User-Id -Mac-address -BSSID / SSID / Wlan -AP-Name -Device-Type -Reply message -RADIUS		

RBAC Features on Samsung APC

Role Based Access Control:

1) v2.3.8

- Support for 802.1x users
- ACL/QoS/VLAN service with Radius Server
- Role-profile based user service with Radius Server

2) v2.4.x

- URL-redirect service with Radius Server
- Filter-Id based user service with Radius Server
- Role-profile selection by Derivation Profile (condition = User-id)

3) V3.0

- Support for web auth users
- Condition enhancement in Derivation Profile
  - Mac-addres
  - BSSID
  - SSID
  - Wlan
  - AP name
  - Device type
  - Reply message
  - Radius

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Thank you!