Instant 3.3: BYOD and Captive portal Enhancements

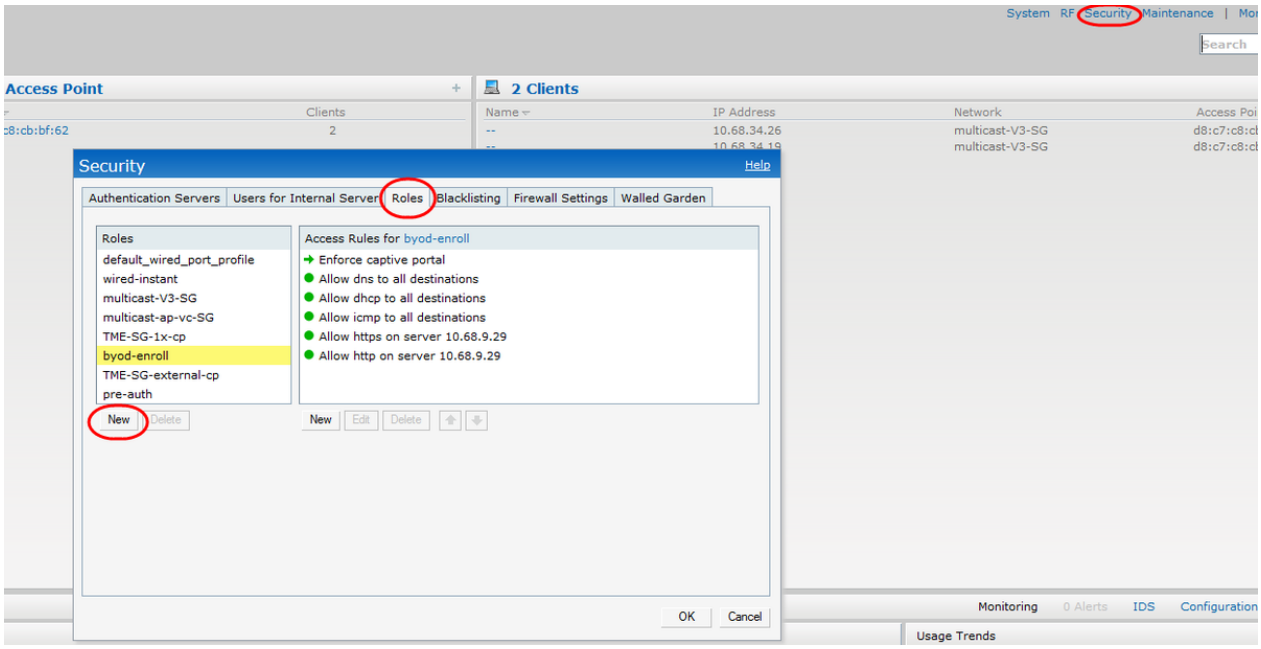
BYOD on a Single SSID

Instant OS 3.2 and earlier did not provide the ability to redirect a client to a captive portal page post 802.1X authentication. This limitation required the use of 2 SSIDs: 1) provisioning SSID 2) approved device SSID (802.1X) to provide a complete BY0D solution. In Instant OS 3.3, Aruba introduced the ability to redirect a client to a captive portal page after 802.1X authentication. This new enhancement provides the ability to append a captive portal redirection to a user role. This enhancement coupled with the ability to define a user role based on the EAP authentication type allows the use of a single SSID for a complete BYOD solution. The steps involved in configuring a single SSID for BYOD are these:

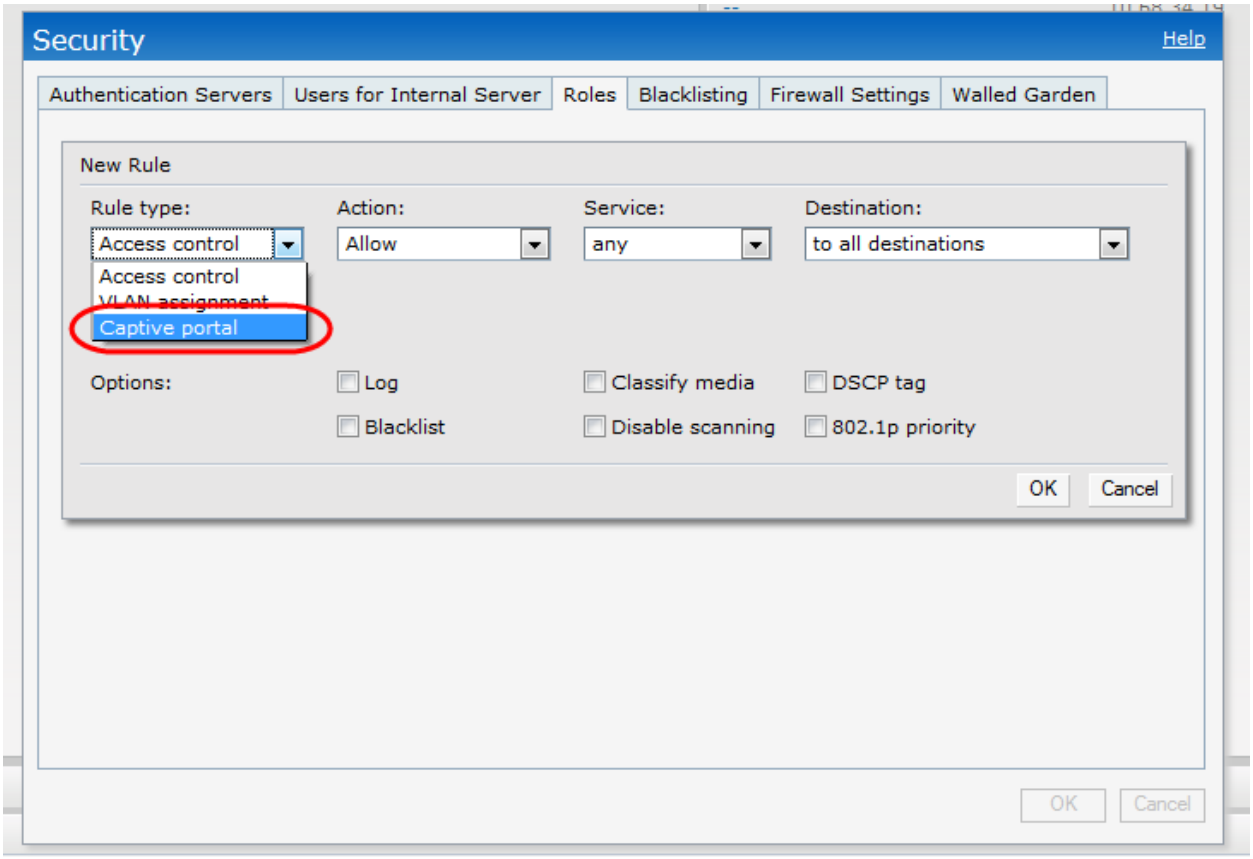
1. Create a user role with captive ported redirection
2. Create an employee SSID with WPA2_Enterprise authentication
3. In the employee SSID configuration create a derivation rule that assigns the captive portal user role based on 802.1X authentication type (Ex: EAP-PEAP MSCHAPv2)
4. Optionally, configure ClearPass to return non-captive user role for users authenticating using EAP-TLS . By default, a user authenticating with an EAP-method other than the one in Step 3 is assigned the default-role for the SSID.

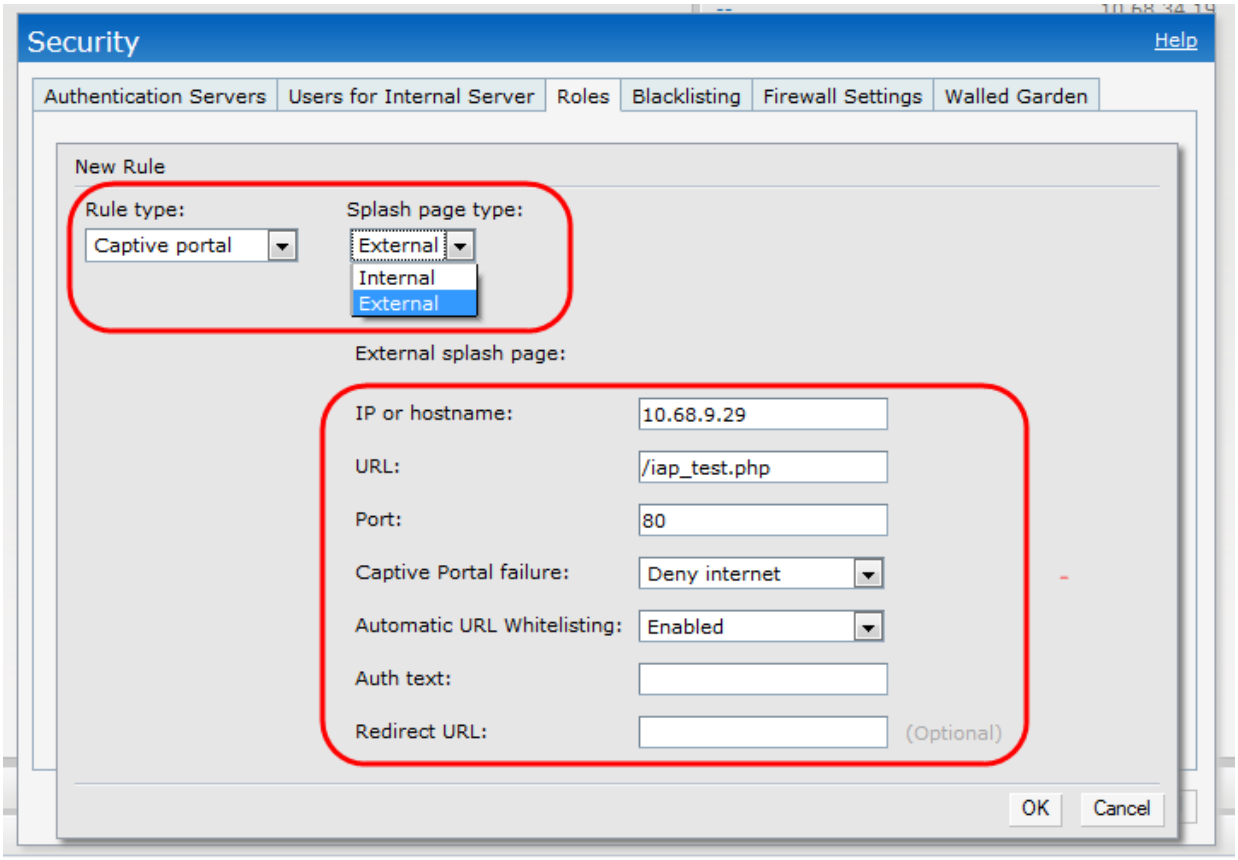
STEP 1: Create a user role with captive portal redirection

- Create a new role: byod-enroll

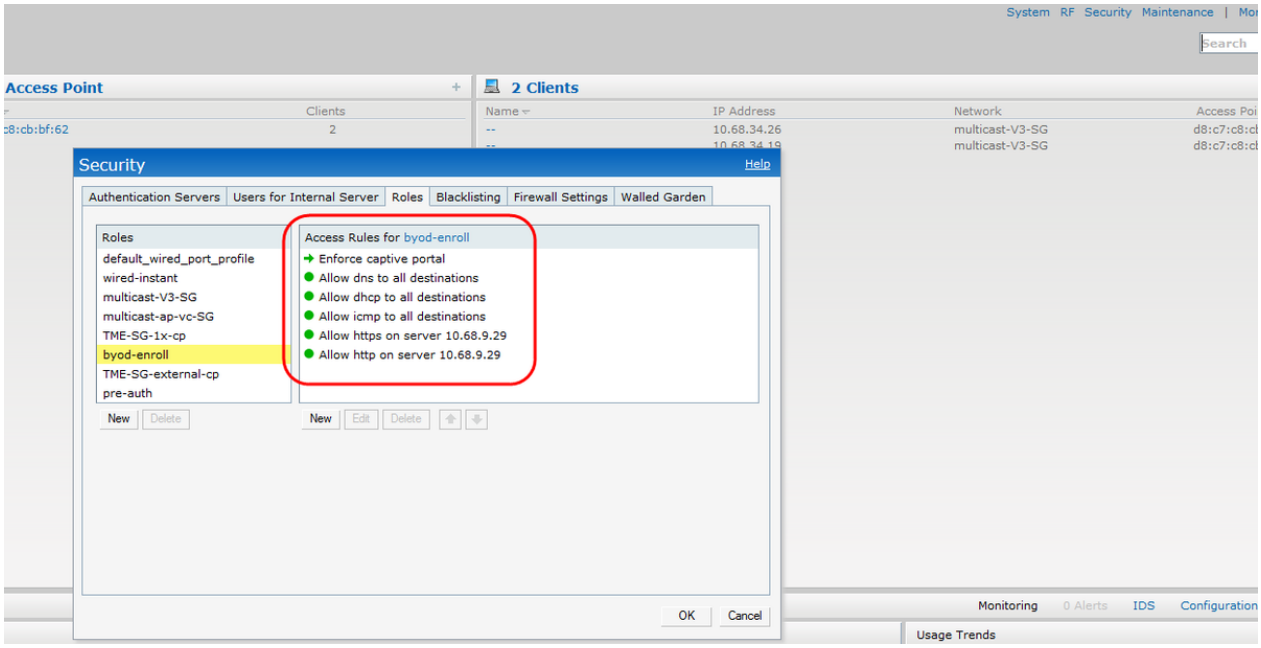


- Create a captive portal access rule





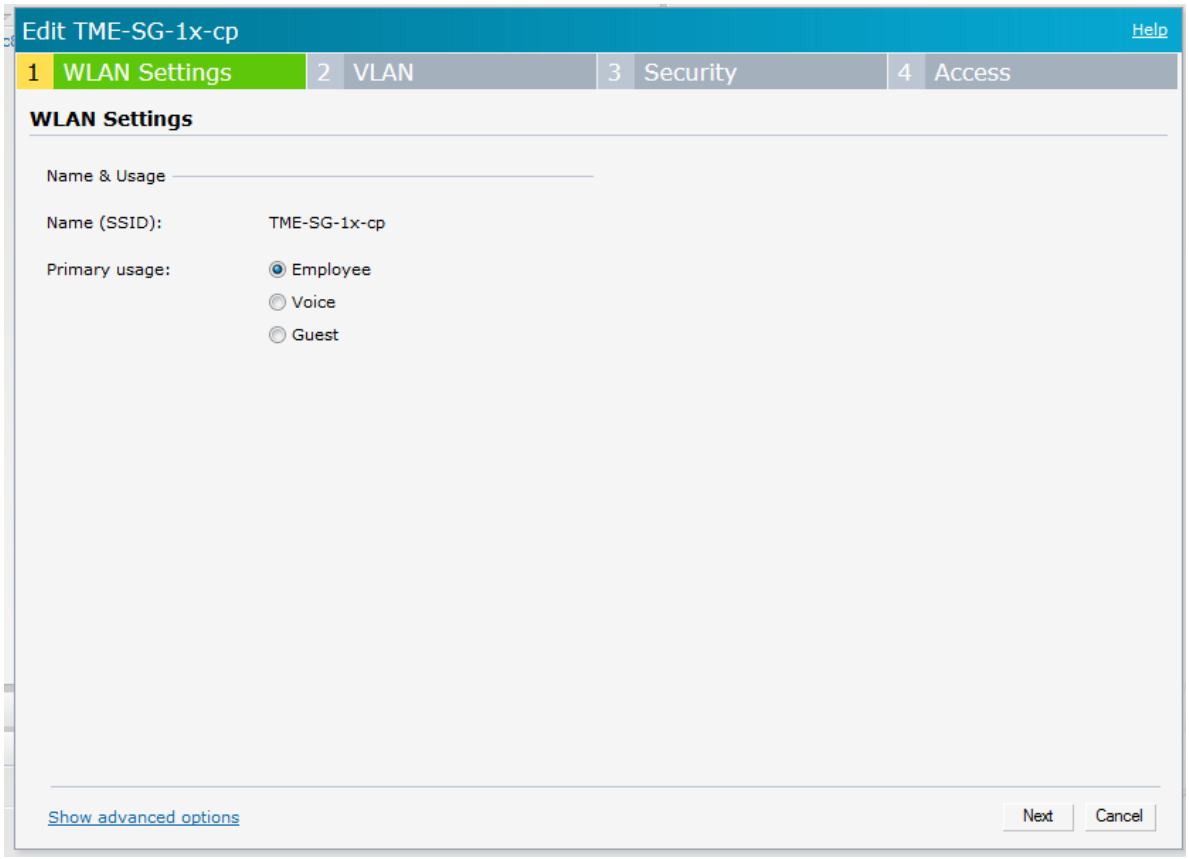
- Allow DNS, DHCP to all destinations and HTTP/HTTPS access to ClearPass server.

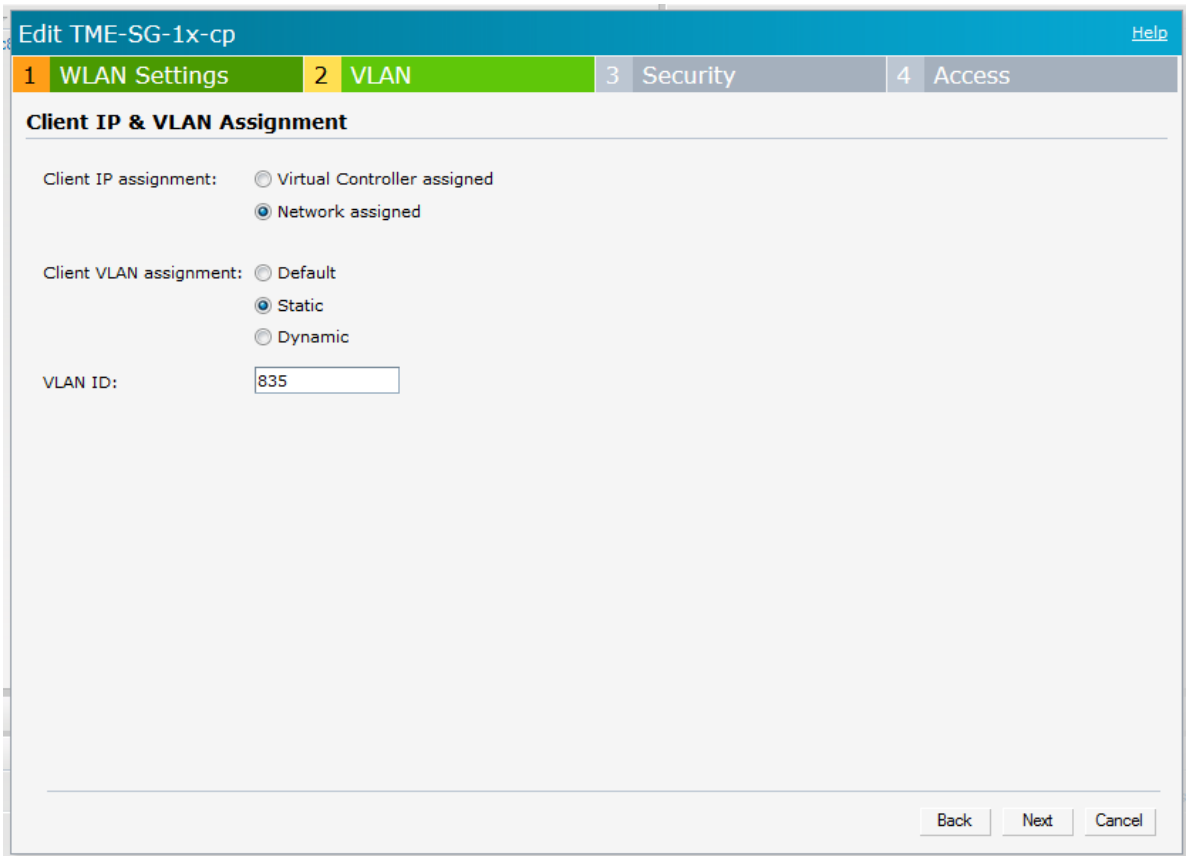


Note: Ensure that the appropriate servers and URLs are whitelisted. See Amigopod ClearPass Guest Whitelist Reference for details.

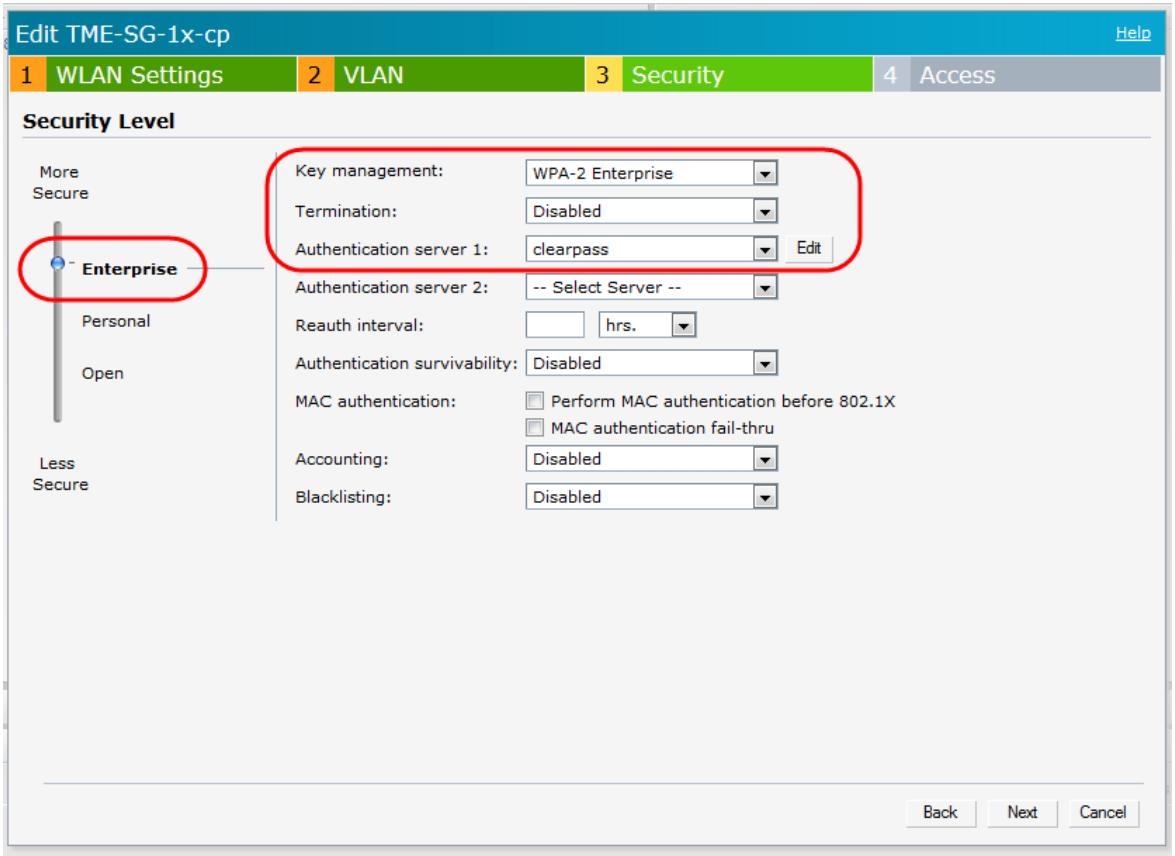
STEP 2: Create an Employee SSID

- Configure SSID name and VLAN



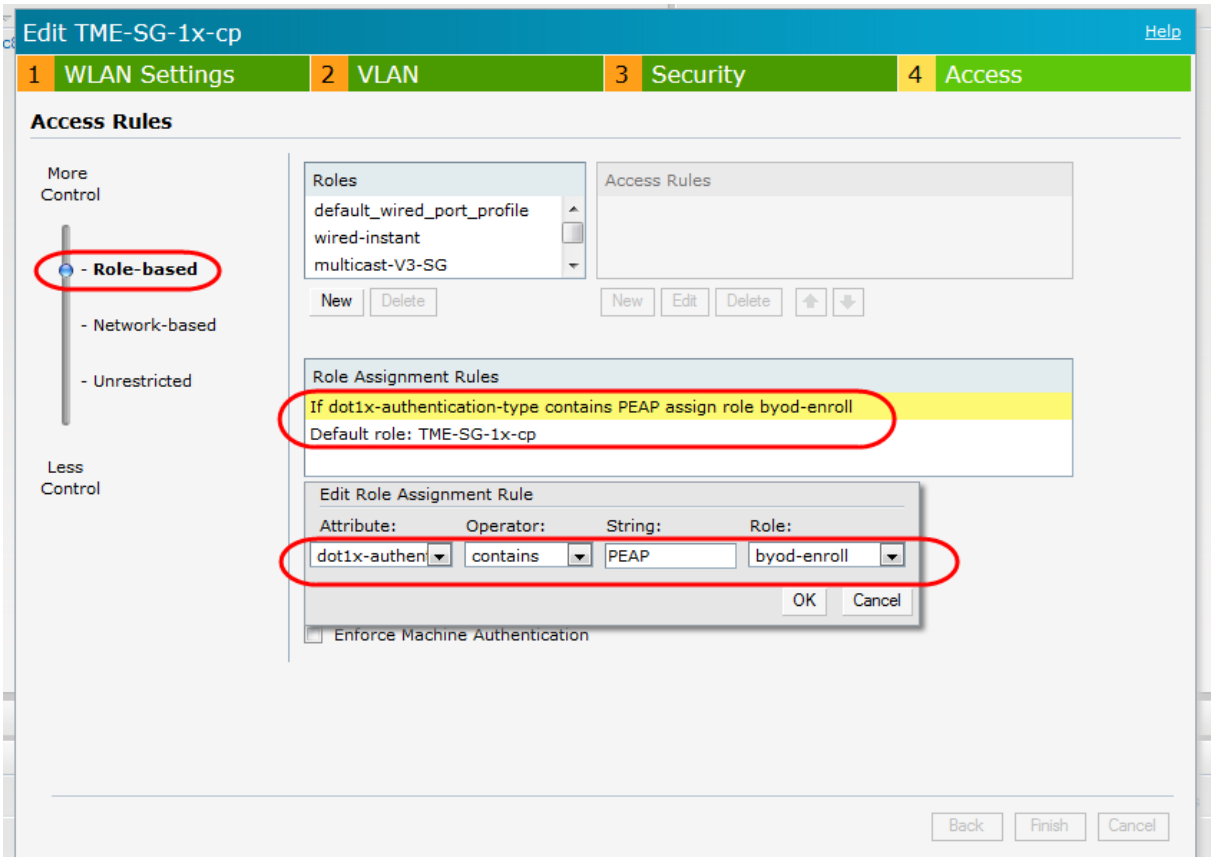


- Configure WPA2-Enterprise security on the SSID



STEP 3: Configure the access settings of the SSID with appropriate 802.1X authentication type based derivation rule

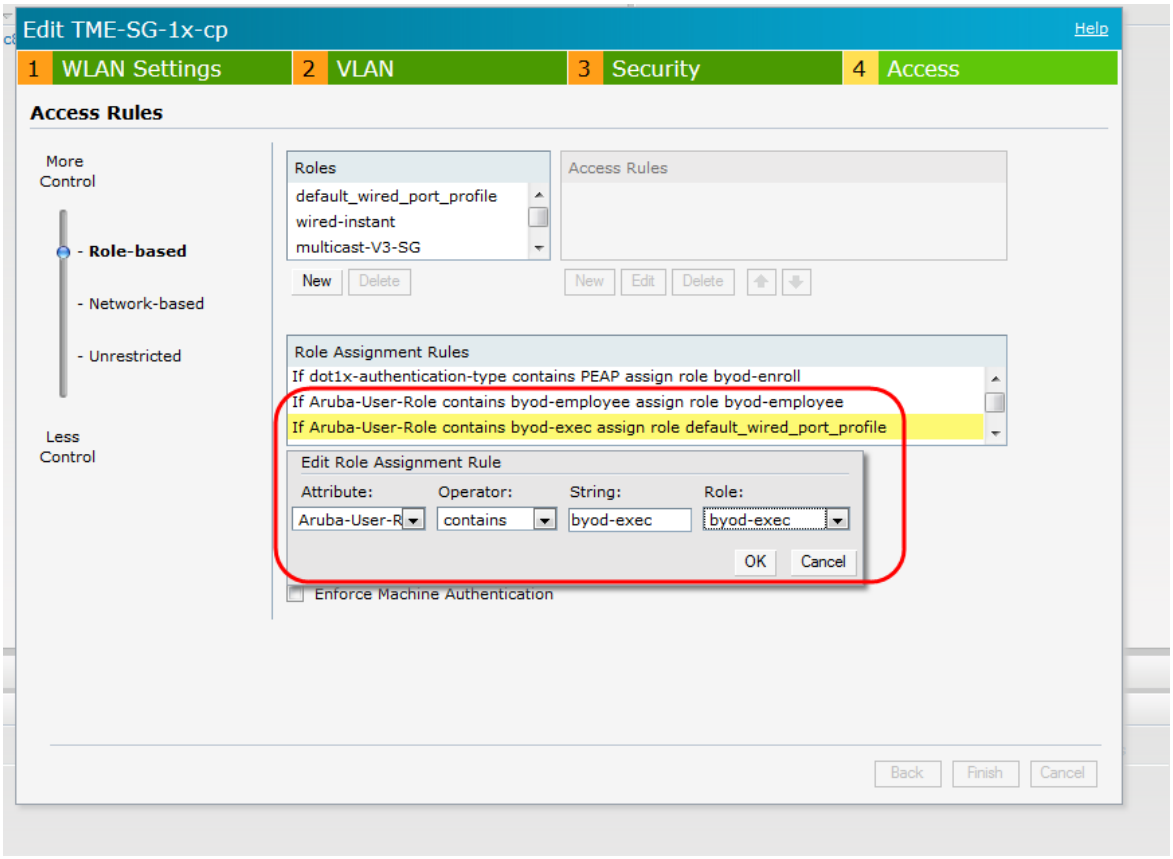
- Configure a derivation rule based on the EAP-type. If the user authenticates with PEAP-MACHAPv2 assign the byod-enroll. This will redirect the users to provisioning page.



- User authenticates with EAP types other the PEAP-MSCHAPv2 will be assigned the default role for the SSID. The provisioning process on ClearPass will install certificates and configure the client's wireless supplicant for EAP-TLS.
- When the client reconnects to the SSID during the final step of the provisioning process it uses EAP-TLS. This will assign the default SSID role to the client.

STEP 4: If required configure IAP for server derived rules

- Using the Aruba-User-Role VSA, ClearPass can push user roles to IAP. The accomplish this, the IAP should be configured with the appropriate user role definition ad server derived rule.


Edit TME-SG-1x-cp
Help
1 WLAN Settings
2 VLAN
3 Security
4 Access
Access Rules
More Control
- Role-based
- Network-based
- Unrestricted
Less Control
Roles
default_wired_port_profile
wired-instant
multicast-V3-SG
New
Delete
Access Rules
New
Edit
Delete
Role Assignment Rules
If dot1x-authentication-type contains PEAP assign role byod-enroll
If Aruba-User-Role contains byod-employee assign role byod-employee
If Aruba-User-Role contains byod-exec assign role default_wired_port_profile
Edit Role Assignment Rule
Attribute:
Operator:
String:
Role:
Aruba-User-R
contains
byod-exec
byod-exec
OK
Cancel
Enforce Machine Authentication
Back
Finish
Cancel

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