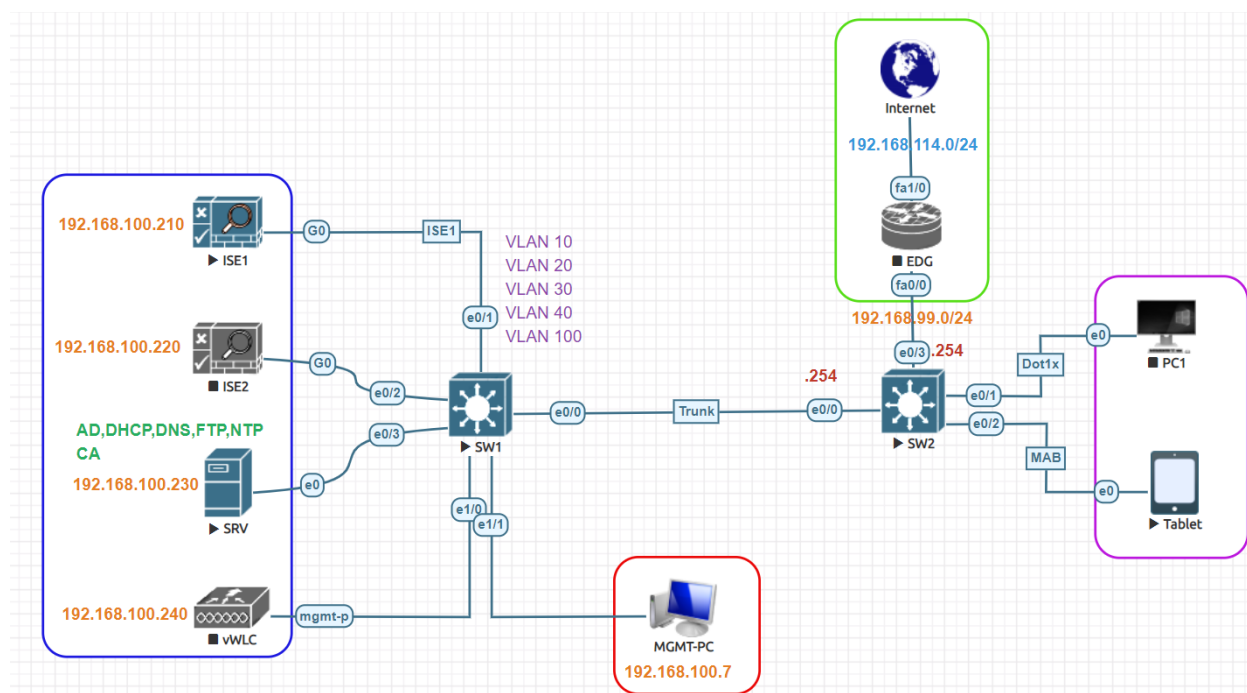## Profile Lab:

Cisco ISE Primary IP Address	192.168.100.210
Cisco ISE Secondary IP Address	192.168.100.220
AD, DNS and CA Server IP Address	192.168.100.230
Domain Name:	test.local
Test User/Group	E1/Employee
Test VLAN	VLAN 20
VLAN Subnet	192.168.20.0/24
VLAN 20 Gateway	192.168.20.1
Authenticator Switch	SW2
Authentication Switch MGMT IP	192.168.100.254
SW2 Dot1x Interface	Ethernet 0/1
SW2 MAB Interface	Ethernet 0/2
Profile Device	PC1
Profile Device	Tablet

Dot1X Configuration
SW2(config)#aaa new-model
SW2(config)#dot1x system-auth-control
SW2(config)#radius server ISE1
SW2(config-radius-server)# address ipv4 192.168.100.210 auth-port 1812 acct-port 1813
SW2(config-radius-server)#key Test123
SW2(config-radius-server)#radius server ISE2
SW2(config-radius-server)# address ipv4 192.168.100.220 auth-port 1812 acct-port 1813
SW2(config-radius-server)#key Test123
SW2(config-radius-server)#radius-server attribute 6 on-for-login-auth
SW2(config)#radius-server attribute 8 include-in-access-req
SW2(config)#radius-server attribute 25 access-request include
SW2(config)#radius-server vsa send accounting
SW2(config)#radius-server vsa send authentication
SW2(config)#radius-server dead-criteria time 30 tries 3
SW2(config)#radius-server timeout 2
SW2(config)#aaa group server radius ISE-GROUP
SW2(config-sg-radius)#server name ISE1
SW2(config-sg-radius)#server name ISE2
SW2(config-sg-radius)#ip radius source-interface Vlan100
SW2(config-sg-radius)#aaa authentication dot1x default group ISE-GROUP
SW2(config)#aaa authorization network default group ISE-GROUP
SW2(config)#aaa accounting update periodic 5
SW2(config)#aaa accounting dot1x default start-stop group ISE-GROUP
SW2(config)#aaa server radius dynamic-author
SW2(config-locsvr-da-radius)#client 192.168.100.210 server-key Test123
SW2(config-locsvr-da-radius)#client 192.168.100.220 server-key Test123
SW2(config-locsvr-da-radius)#snmp-server community Test123 RO
SW2(config)#interface Ethernet0/1
SW2(config-if)#description win10 node
SW2(config-if)#switchport access vlan 20
SW2(config-if)#switchport mode access
SW2(config-if)#authentication host-mode multi-auth
SW2(config-if)#authentication port-control auto
SW2(config-if)#mab
SW2(config-if)#dot1x pae authenticator
SW2(config-if)#dot1x timeout tx-period 10
SW2(config-if)#spanning-tree portfast edge
SW2(config-if)#authentication event fail action next-method
SW2(config-if)#authentication order dot1x mab

DHCP Probe:

Navigate to Administration >System >Deployment > Profiling Configuration this time disable RADIUS Probe and only enable DHCP Probe.
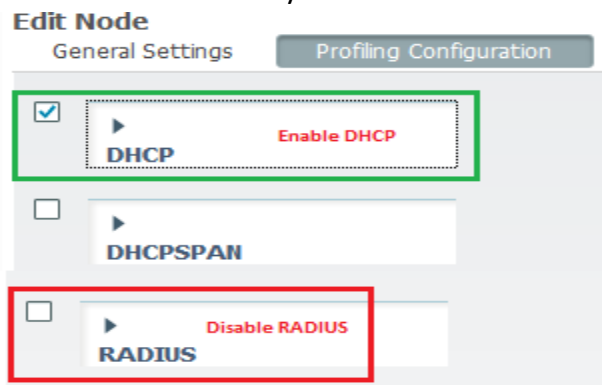
Configure the switch to forward DHCP request to Cisco ISE.

```
SW2(config)#interface vlan 20
SW2(config-if)#ip helper-address 192.168.100.230
SW2(config-if)#ip helper-address 192.168.100.210
```

```
SW#show running-config interface vlan 20
Building configuration...

Current configuration : 135 bytes
!
interface Vlan20
 ip address 192.168.20.1 255.255.255.0
 ip helper-address 192.168.100.230
 ip helper-address 192.168.100.210
end
```

Looking at one of profiled hosts Work Centers>Profiler> Endpoint Classification> Endpoints, see the attributes that were collected this time by DHCP.

Other Attributes	
BYODRegistration	Unknown
DeviceRegistrationStatus	NotRegistered
ElapsedDays	30
EndPointPolicy	Xerox-Device
EndPointProfilerServer	.
EndPointSource	DHCP Probe
EndPointVersion	8
IdentityGroup	Profiled