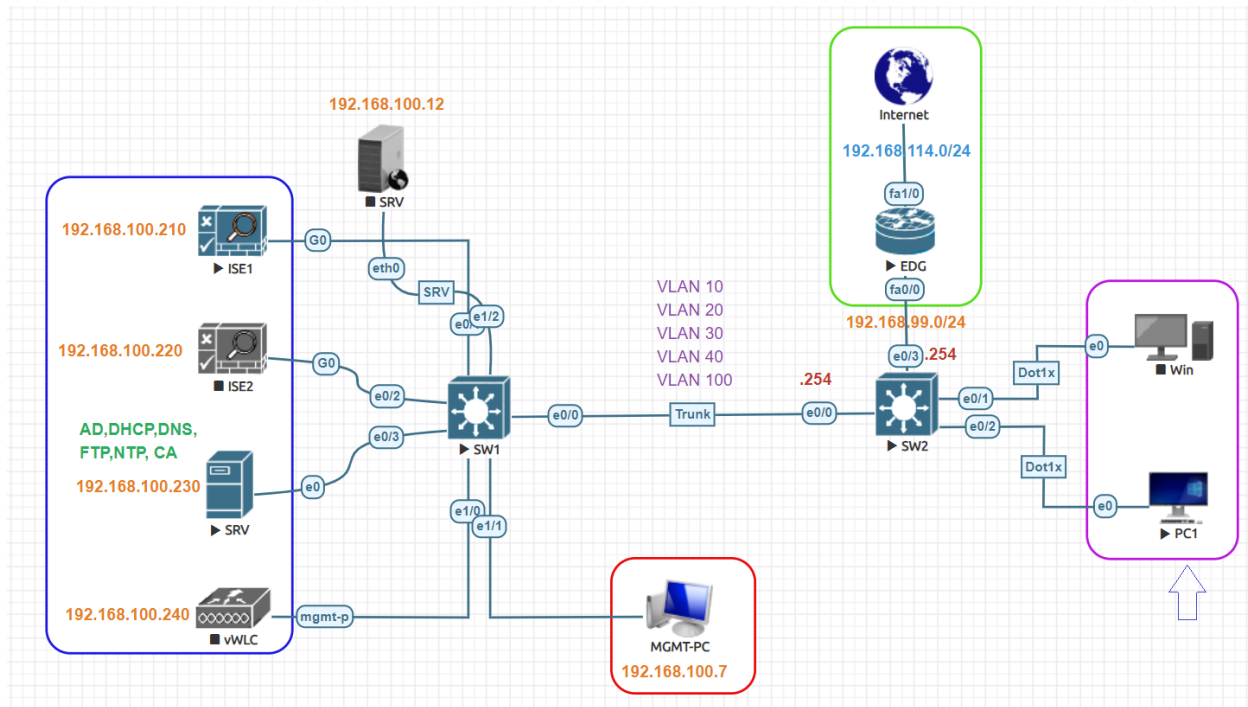


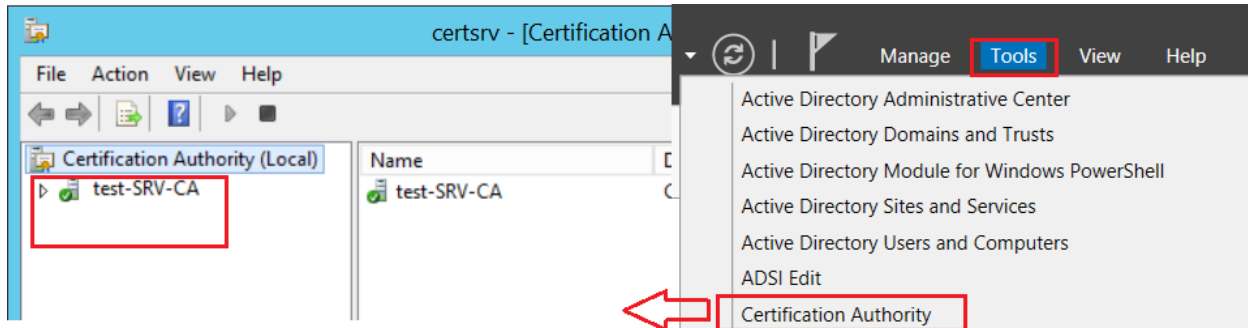
## Certificate-Based Authentication LAB:



Cisco ISE Primary IP Address	192.168.100.210
Cisco ISE Secondary IP Address	192.168.100.220
AD and DNS IP Address	192.168.100.230
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 0/2
Certificate Authentication	Computer and User
Certificate Template	User and Workstation
Computer Hostname	PC1-Win10
Computer Name	PC1

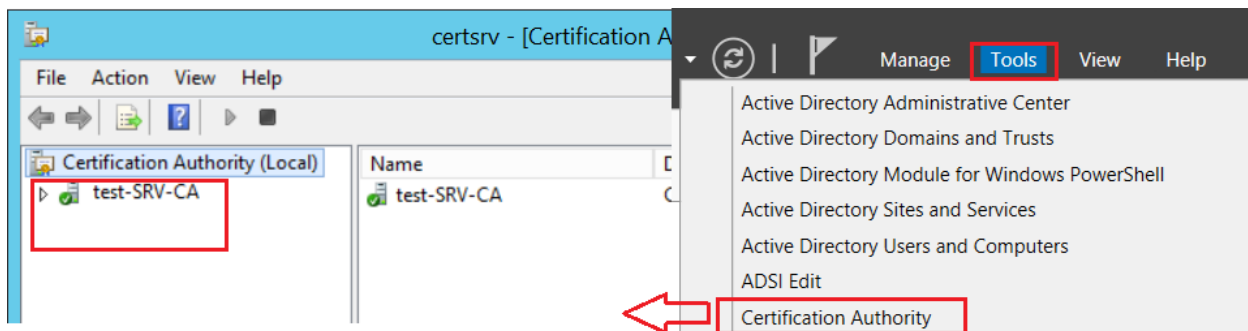
## Create User Certificate Template:

On CA, in **Server Manager**, click **Tools**, and then click **Certification Authority**. The Certification Authority Microsoft Management Console (MMC) opens.



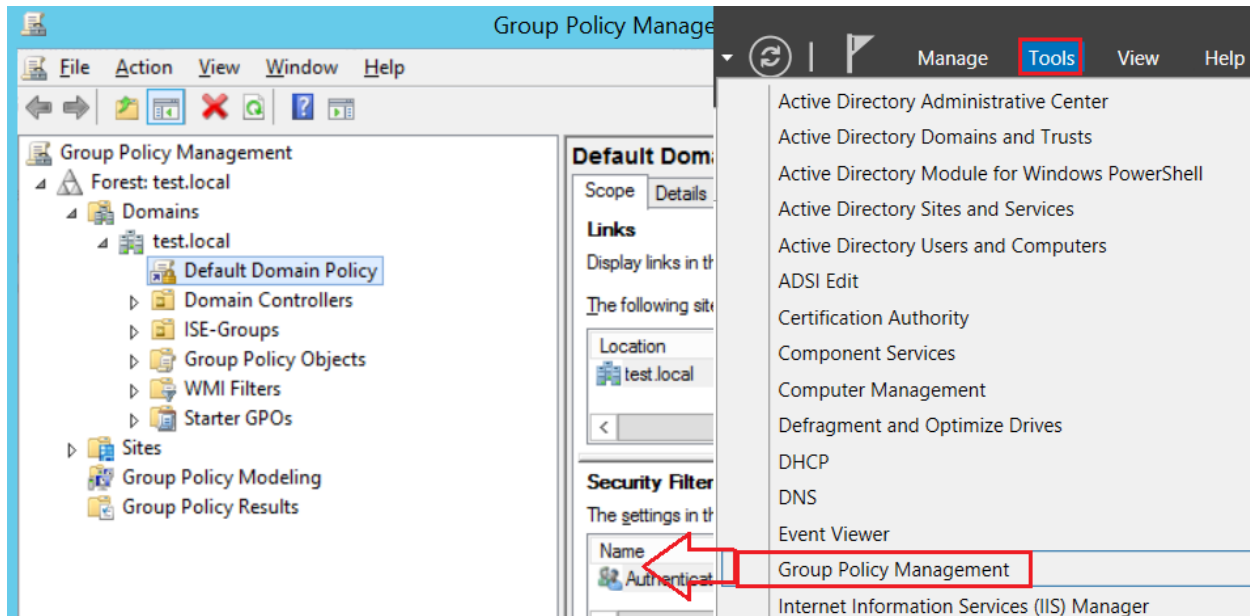
## Create Computer Certificate Template:

On CA, in **Server Manager**, click **Tools**, and then click **Certification Authority**. The Certification Authority Microsoft Management Console (MMC) opens.



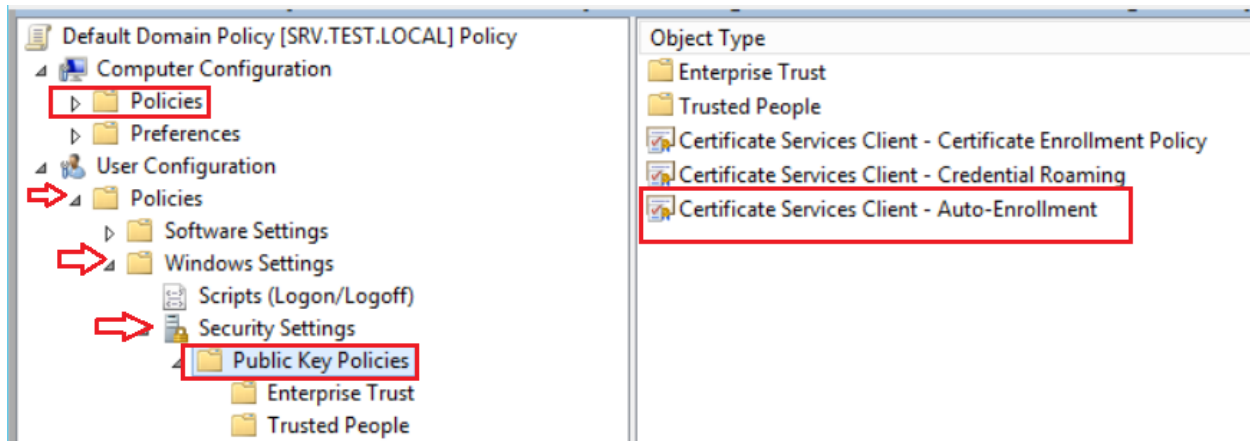
## Create Computer GPO:

On Active Directory, in **Server Manager**, click **Tools**, and then click **Group Policy Management**.



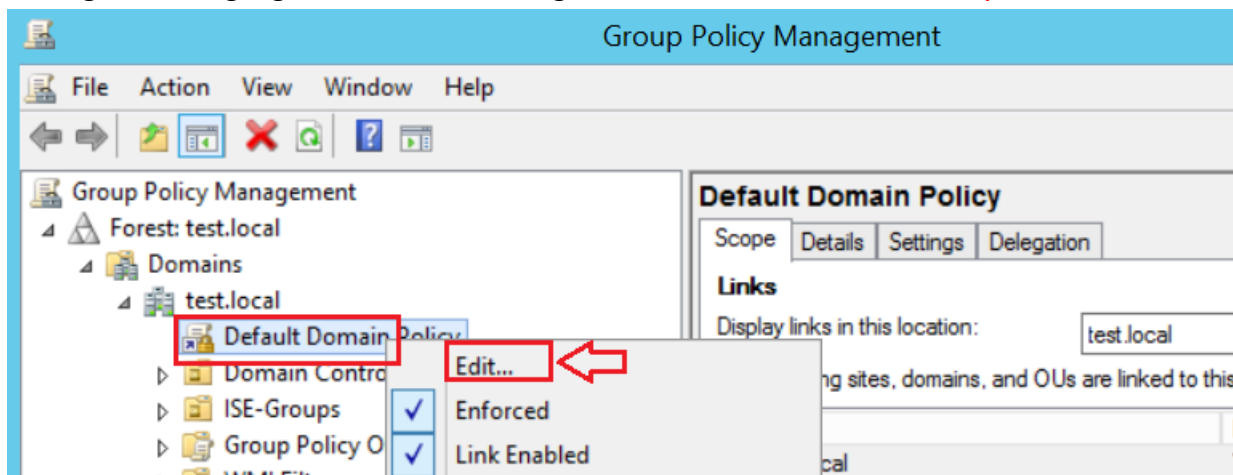
## Create User GPO:

Go to **User Configuration > Windows Settings > Security Settings > Public Key Policies** and then under **Object Type** section in the right pane, select **Certificate Services Client - Auto-Enrollment**.



## Dot1x Client Group Policy:

Let's create group policy to push down dot1x settings to clients. Open Group Policy Management. Highlight the domain and right-click on **Default Domain Policy** and click **Edit**.



## Wired Autoconfig Service:

Wired Autoconfig service is not enabled by default on Windows machines. In order to get the dot1x wired settings to work, this should be enabled so let's create a group policy. Navigate to **Computer Configuration>Policies>Windows Settings>Security Settings>System Settings>Wired Autoconfig**. Check box for Define this policy setting and choose the radio button for **Automatic**.

