

How to build a SSID with AD server authentication in the NXC5500

1. After AD server is setup and confirm that the connection between AD server and NXC is passing, go to NXC add the information of AD server.

Go to **AAA Server > Active Directory > Add**

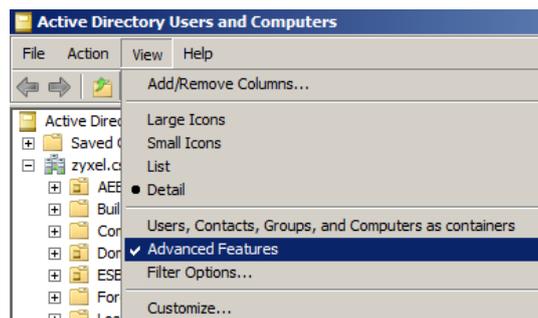
The screenshot shows the ZyXEL NXC5500 configuration interface. The left sidebar shows the navigation menu with 'AAA Server' selected. The main window displays the 'Edit Active Directory' configuration page. The page is divided into several sections, with red boxes highlighting specific fields and labels 'a.' through 'd.' indicating key configuration points:

- a.** General Settings: Name field is set to 'ADServer'.
- b.** Server Settings: Base DN field is set to 'DC=zyxel,DC=cso,DC=c'.
- c.** Server Authentication: Bind DN field is set to 'CN=Administrator,CN=L'. Password and Retype to Confirm fields are filled with asterisks.
- d.** User Login Settings: Domain Authentication for MSChap is enabled. User Name is 'Administrator', User Password and Retype to Confirm are filled with asterisks. Realm is 'zyxel.cso.com' and NetBIOS Name is 'ZYXEL'.

At the bottom, there is a 'Configuration Validation' section with a 'Test' button and a 'Please enter an existing user account in this server to validate the above settings.' message.

How to write the information of AD server on the NXC? There is an example by windows 2008 R2 AD server.

***Please confirm that the AD server pick up the **Advanced Features** of View before you check the information of DN.**



- a. **Base DN:** write the domain name (Figure 1.) or directly point the folder save the user's IDs (Figure 2.).

Go to the AD server and open the Active Directory Users and Computers. **Right click** the **domain name** and go to **Properties > Attribute Editor > distinguishedName > view**. It will show you the content that can be copied and pasted to the NXC in the field of Base DN.

Figure 1: If writing the domain name, administrator will search the entire folders to find the user ID when the user does the authentication.

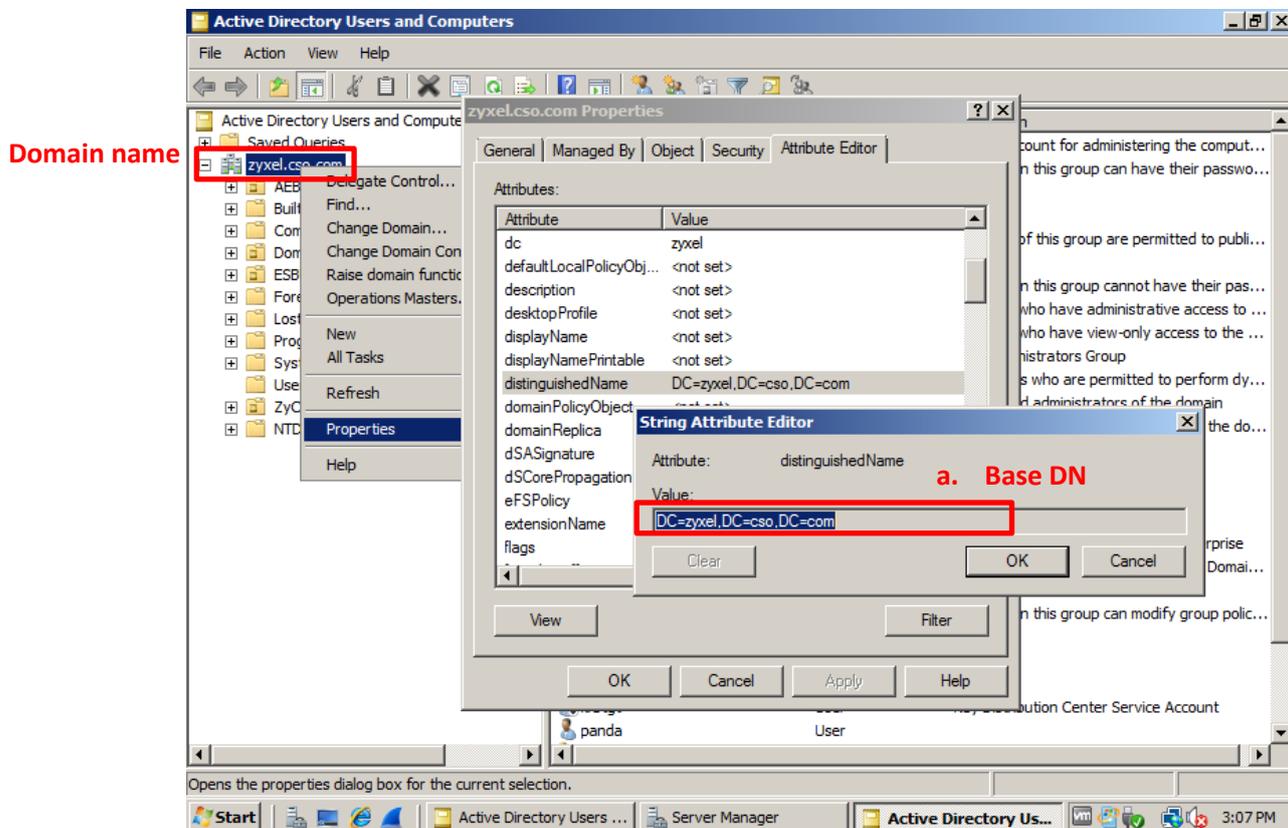
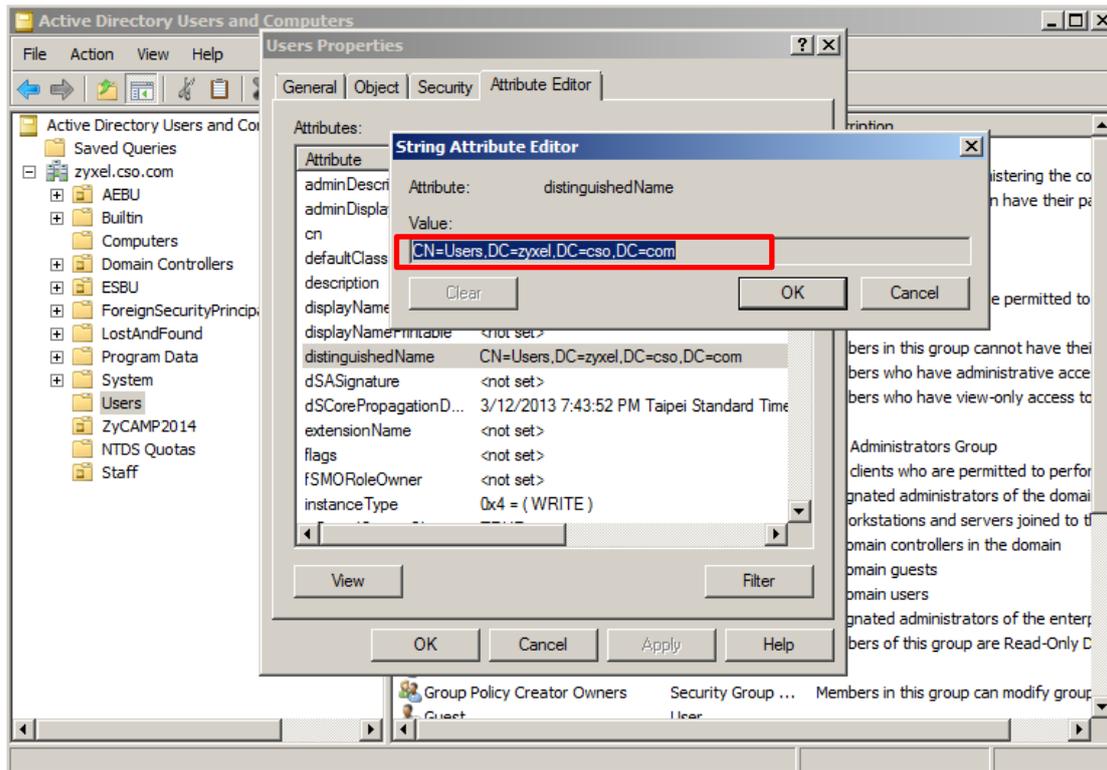


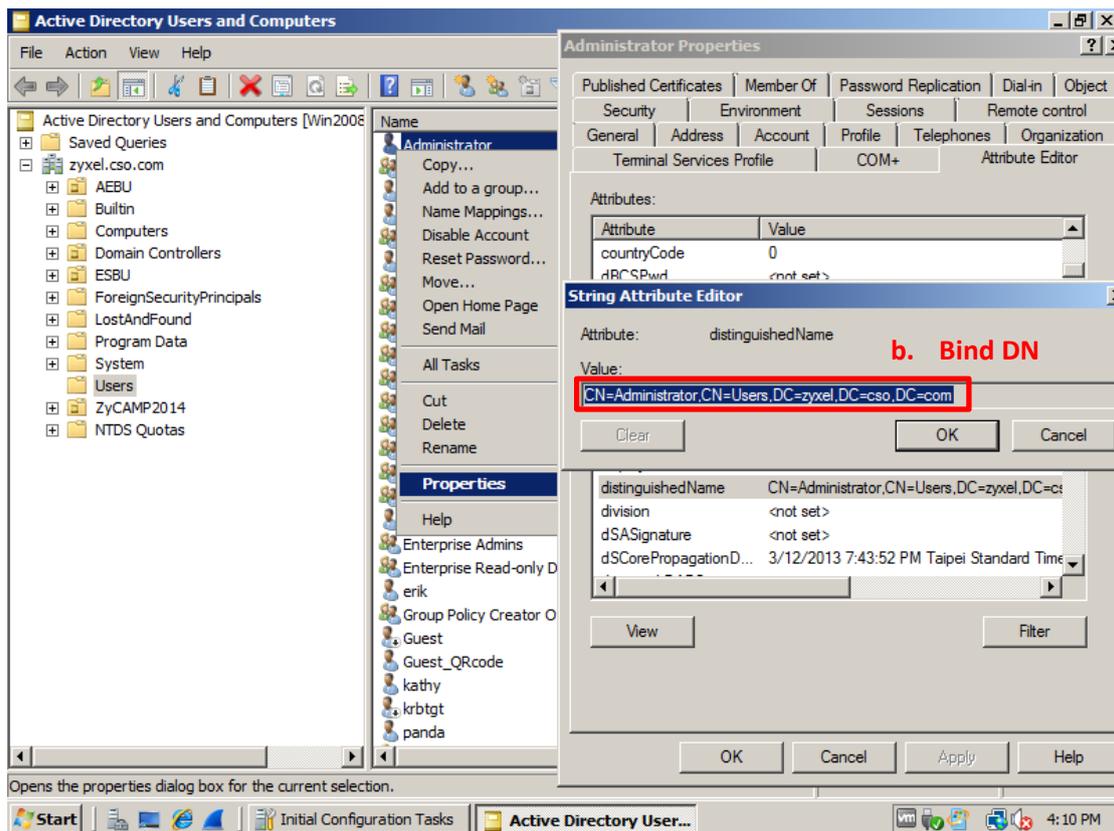
Figure 2: If directly point the users folder, administrator will only search the users folders to find the user ID when the user do the authentication.



b. **Bind DN:** write the username who has privilege to set the configuration of AD server and group setting. In our server, the account of Administrator has the complete privilege for setting. The information of account is same as the account of login AD server.

- Bind DN: CN=Administrator,CN=Users,DC=zyxel,DC=cso,DC=com
- Password : The password of Administrator

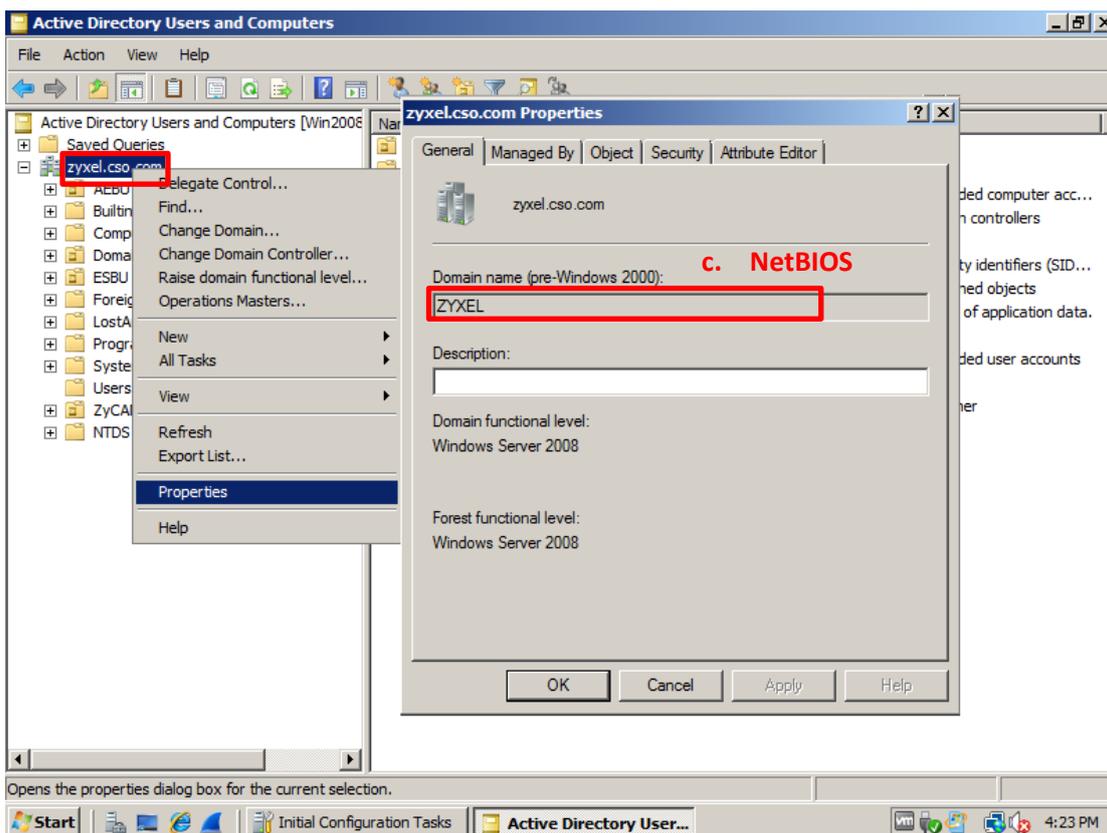
Go to the AD server and open the Active Directory Users and Computers. Select the Users and **right click** the **Administrator** and go to **Properties > Attribute Editor > distinguishedName > view**. It will show you the content that can be copied and pasted to the NXC in the field of Bind DN.



c. Domain Authentication for MSChap

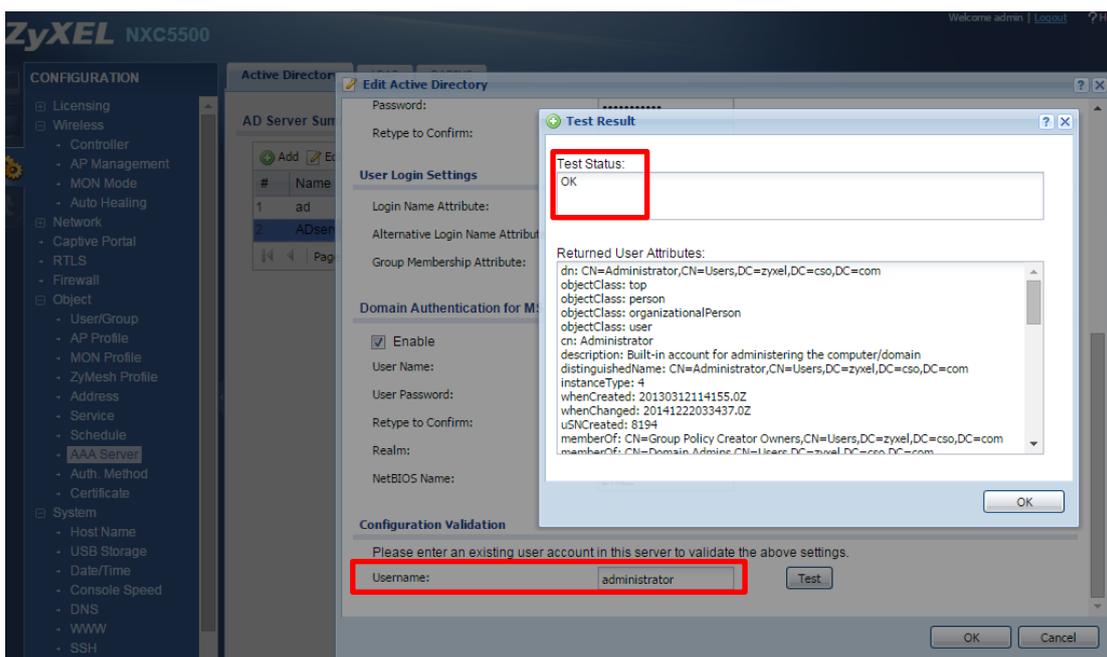
- User name (Must be a user who has rights to add a machine to the domain.)
- Password: write the password of user name.
(You can also write the Administrator account that has complete rights.)
- Realm: write the domain name
- NetBIOS Name: Go to the AD server and open the Active Directory Users and Computers. **Right click** the **domain name** and go to **Properties > General**. It will show you the content that can be copied and pasted to the NXC in the field of NetBIOS.

c. Realm

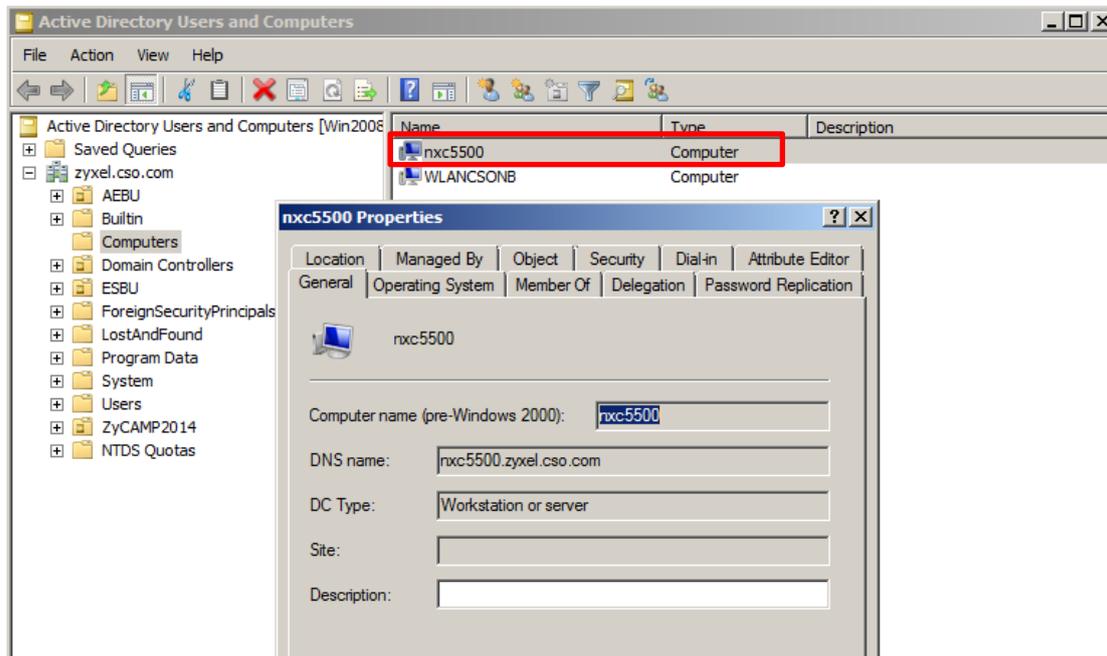


d. Configuration Validation

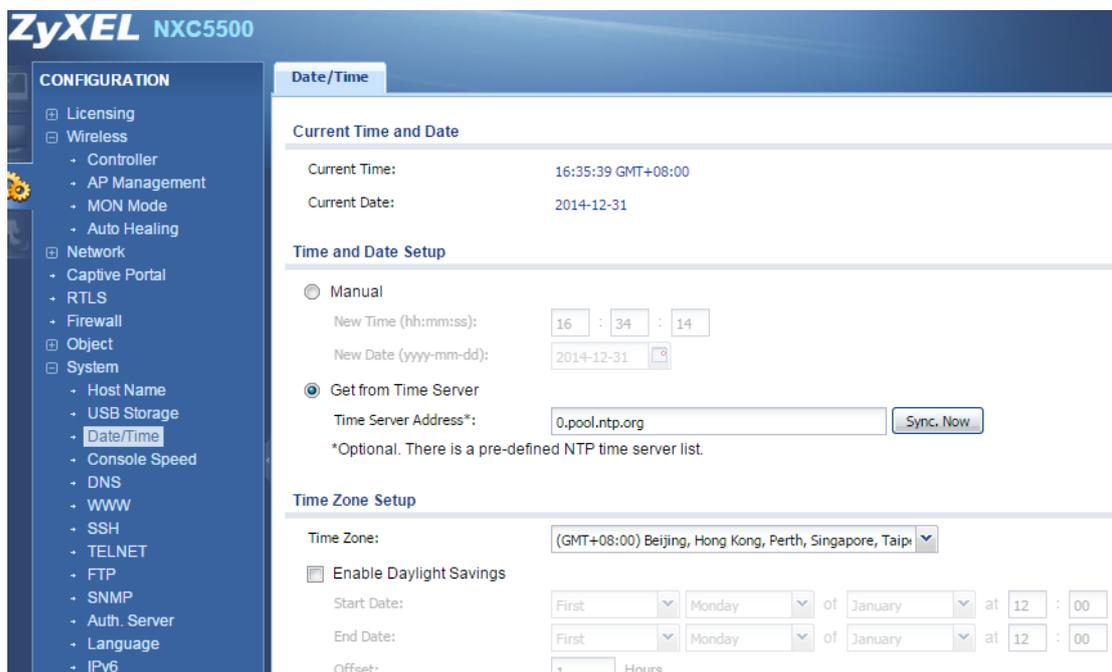
After finish to enter the information of AD server, you can input an account id of AD server for testing whether the information of AD server is correct or not and check the NXC whether added to the AD server automatically.



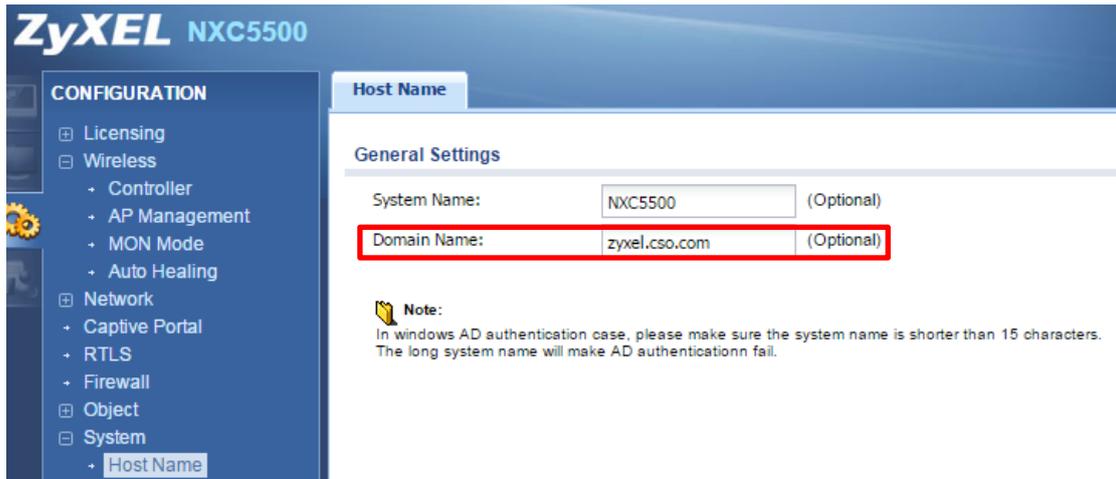
Go to AD server and check **Active Directory Users and Computers > Computer**.



2. Go to **Date/Time**. Make sure the time of NXC and AD server both have the correct time.

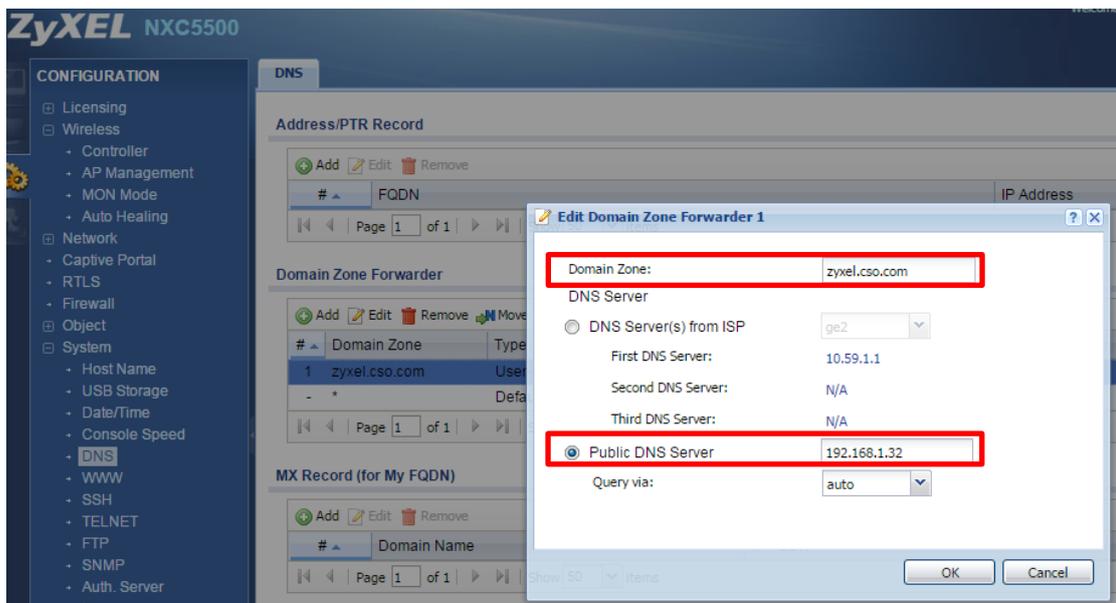


3. Go to **Host Name**. Set the domain name as you set on the AD server.

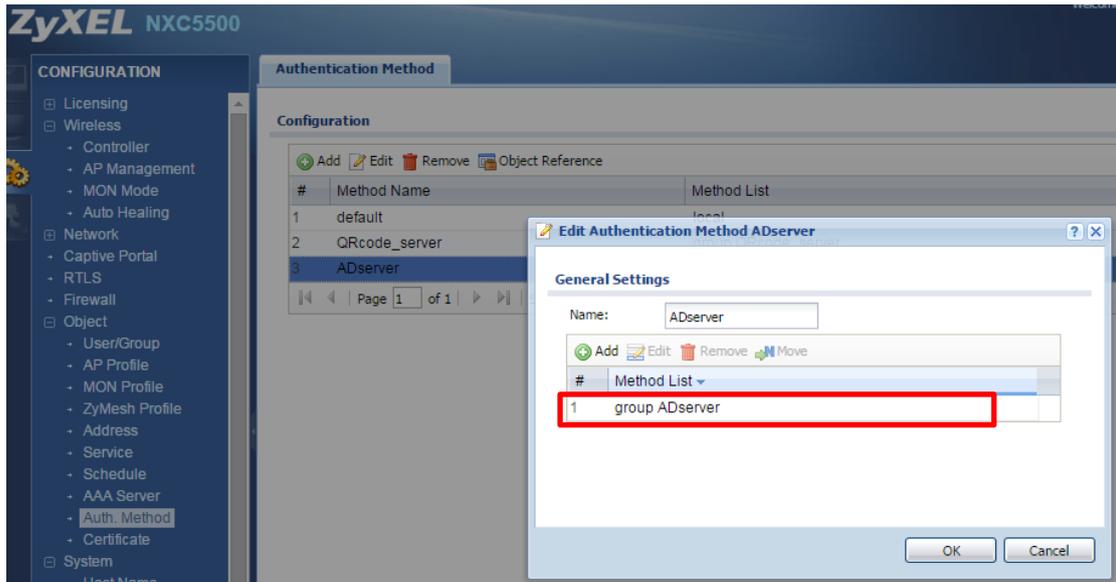


4. Go to **DNS > Domain Zone Forwarder > Add**. Add the information of domain zone.

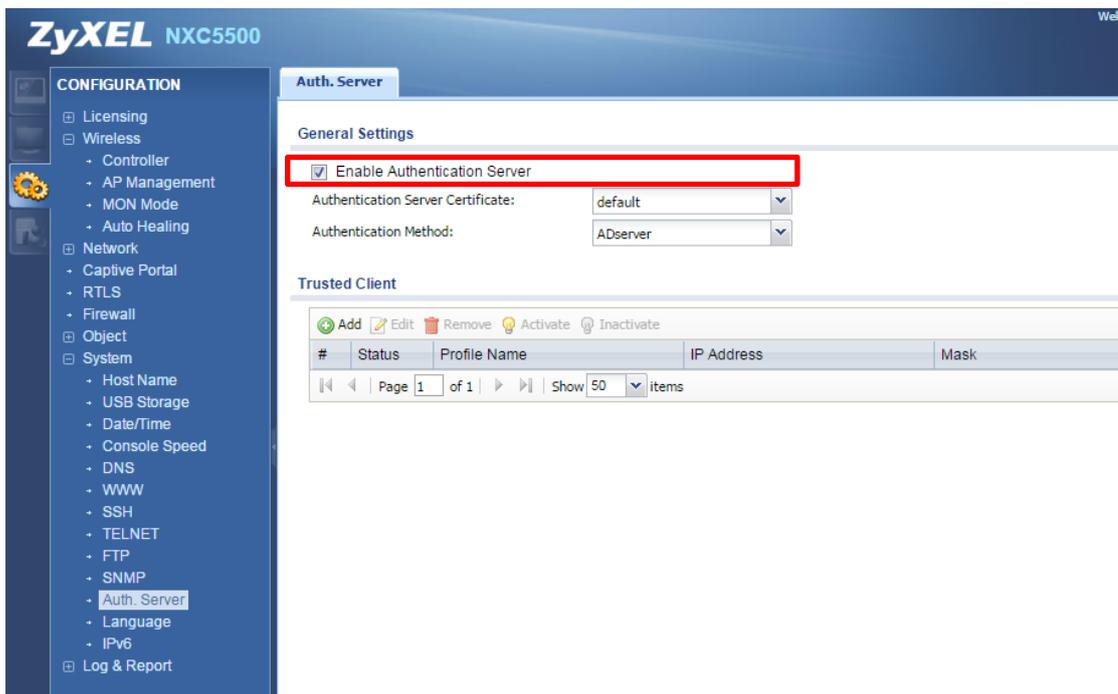
*Public DNS server: write the IP of DNS server can resolve the domain name. If you have no additional DNS server, you can write the IP of AD server.



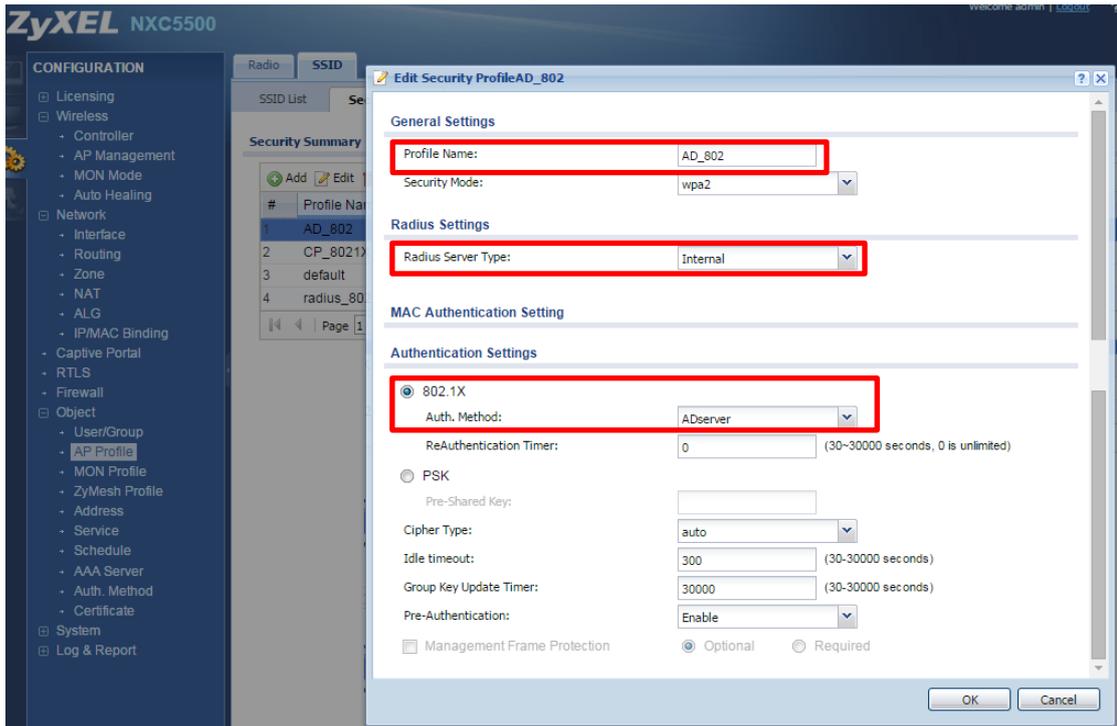
5. Go to **Auth. Method > Add**. Select the AD server you create.



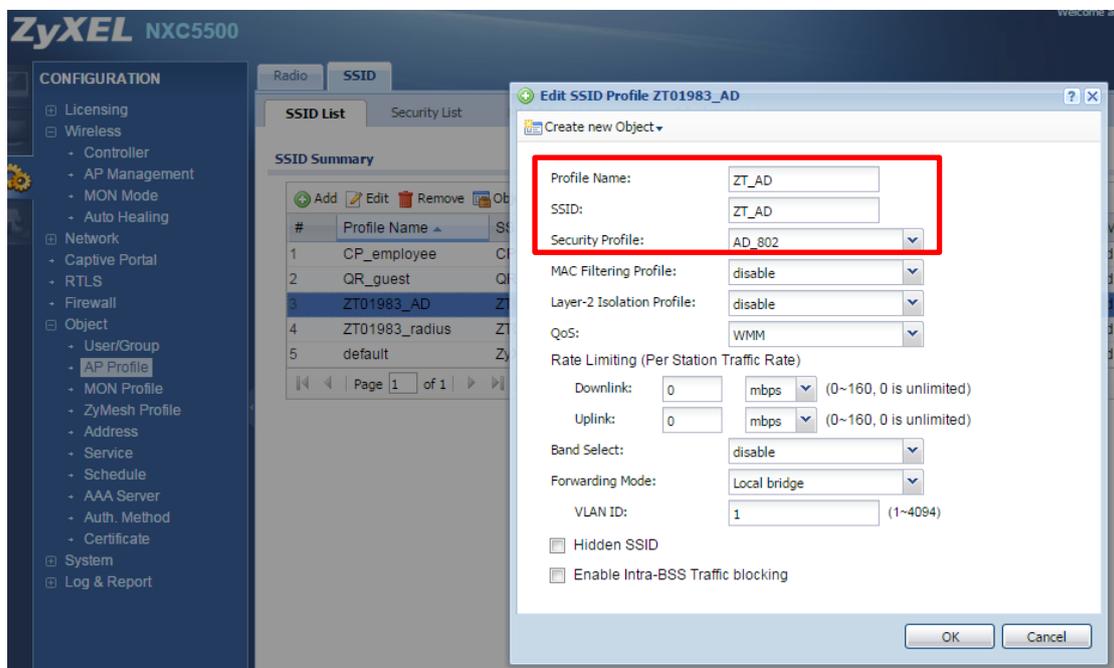
6. Go to **Auth. Server**. Check “Enable Authentication Server” option to enable internal radius server.



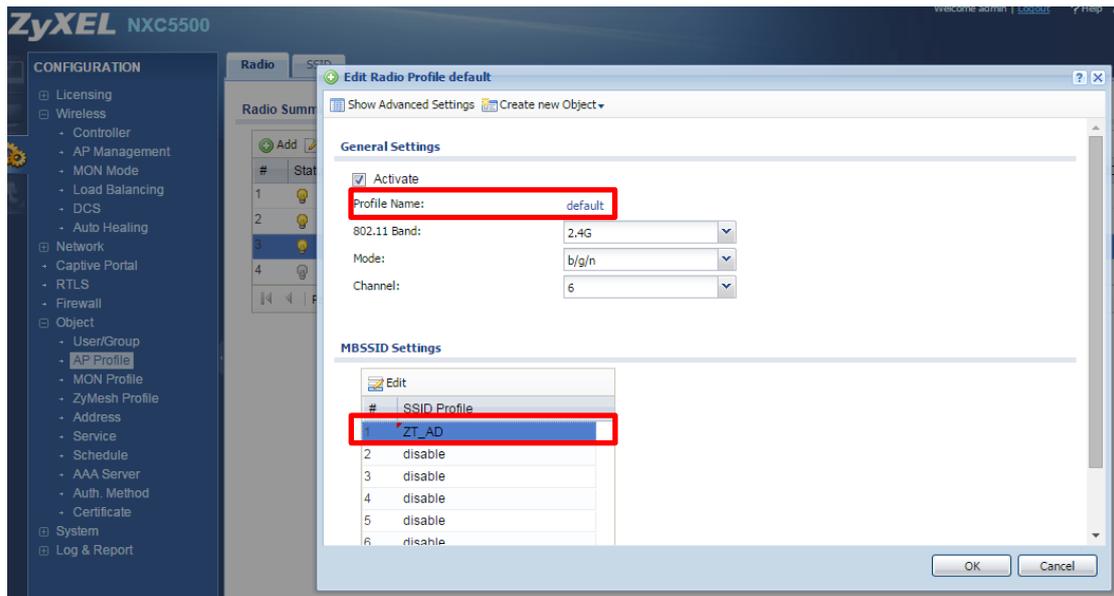
7. Go to **AP Profile > Security List > Add**. Before set the SSID, we need to set an enterprise security to authenticate clients by AD server. In the field of Auth. Method, you can select the method that created from Auth. Method.



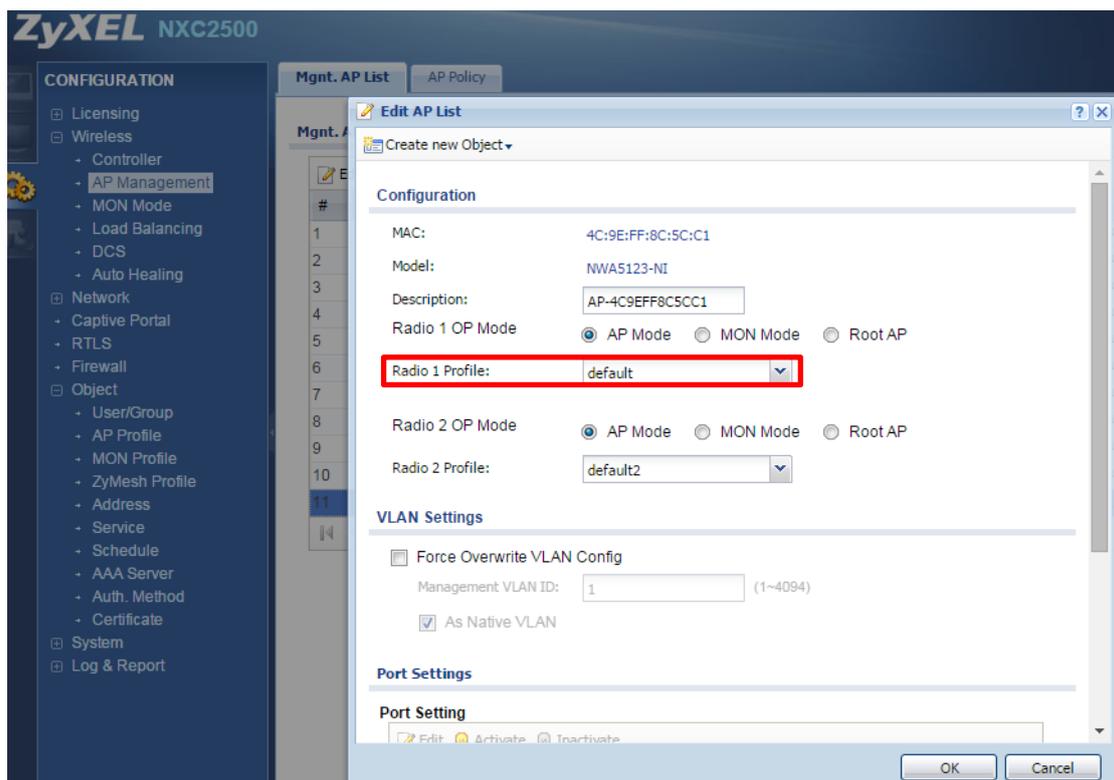
- Go to **AP Profile > SSID > Add**. Add the SSID and select the security profile with enterprise security.



- Go to **AP Profile > Radio > Add**. Add the Radio with SSID you want.



10. Go to AP Management > Mgmt. AP List > Edit. Select an AP to set the radio file and press OK to set the configuration.

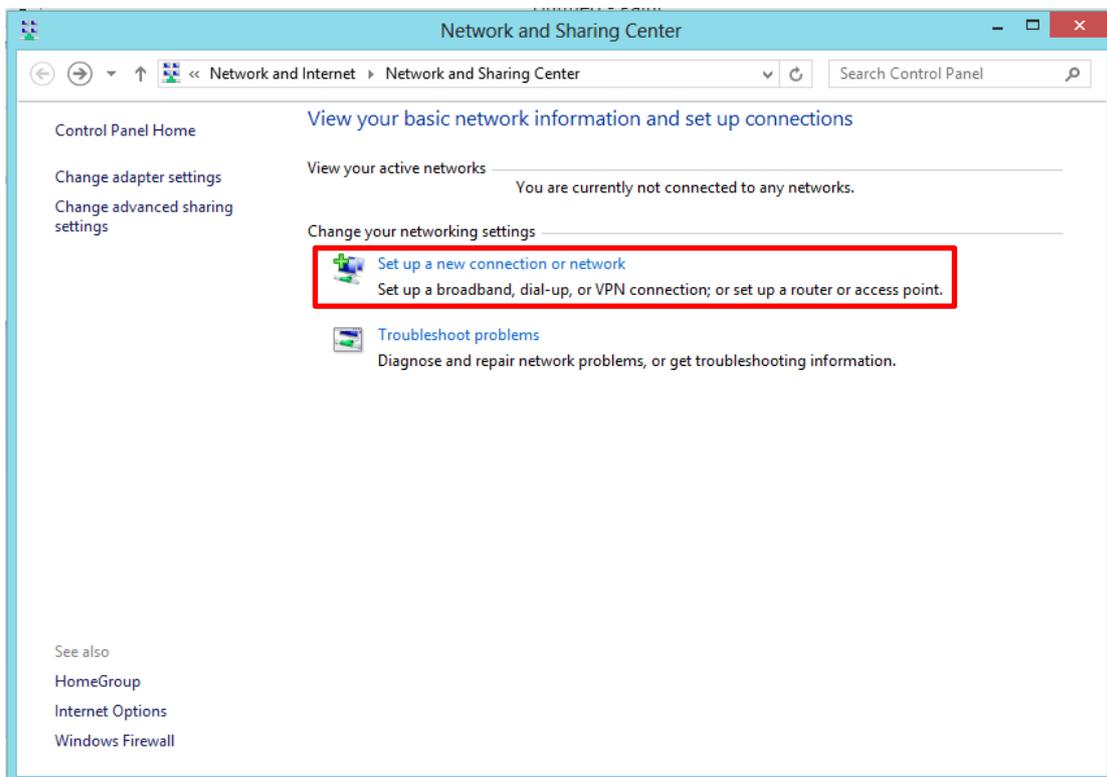


● The configuration of device with windows 8 OS connect the SSID with 802.1X

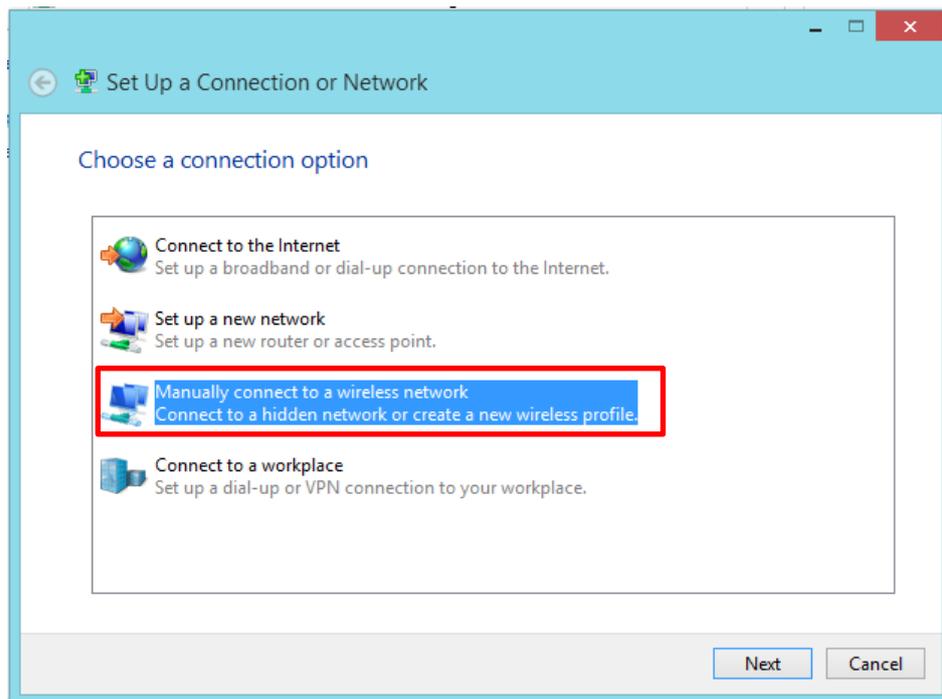
1. Open the “Network and Sharing Center”.



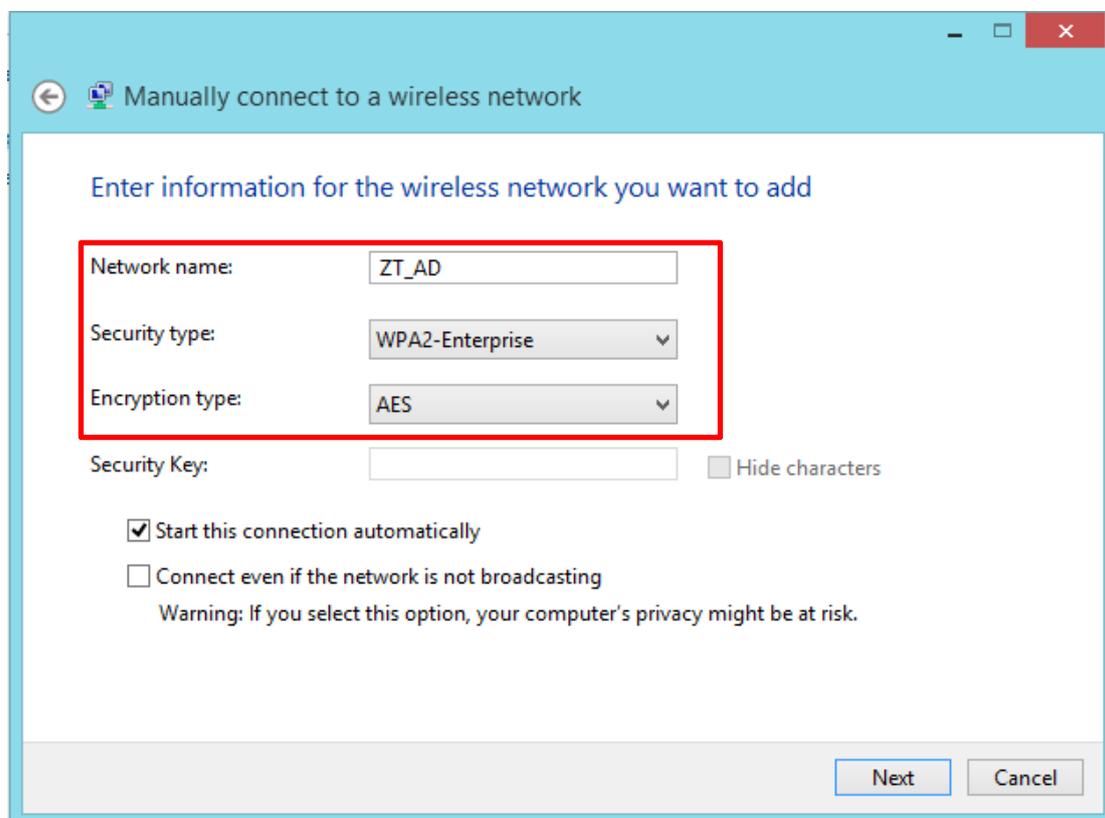
2. Click “Set up a new connection or network”.



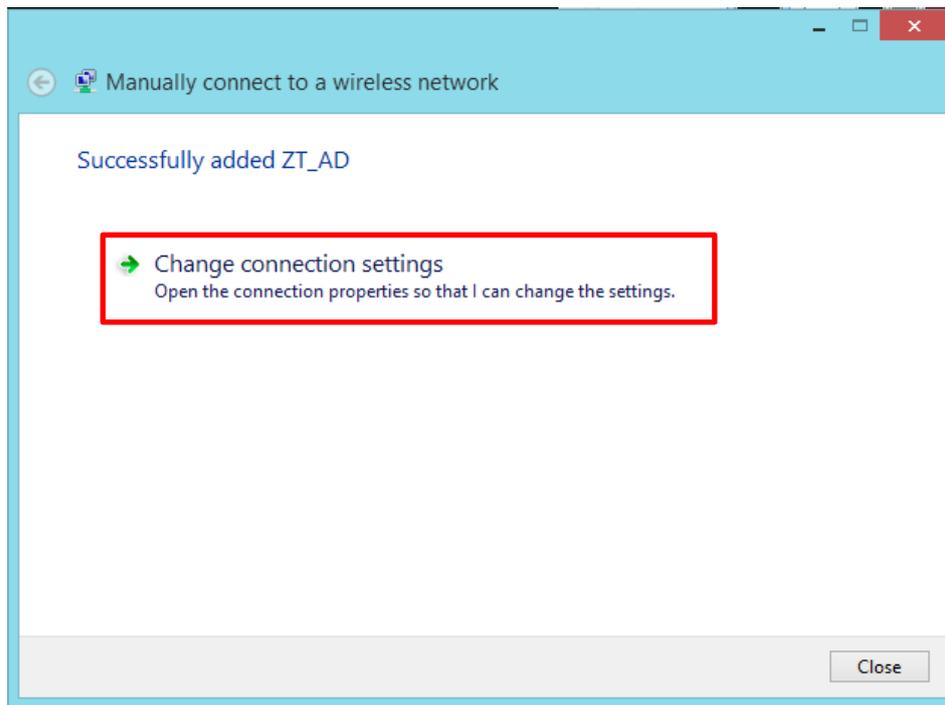
3. Select “Manually connect to a wireless network”.



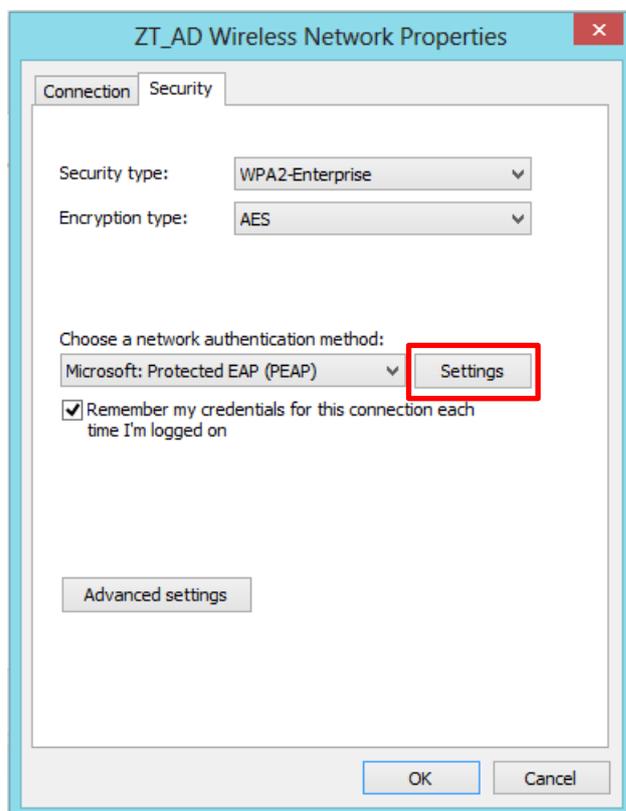
4. Write the SSID you set in the field of **“Network name”** on the NXC5500 and select **Security type** and **Encryption type** you set in the AP profile of NXC5500.



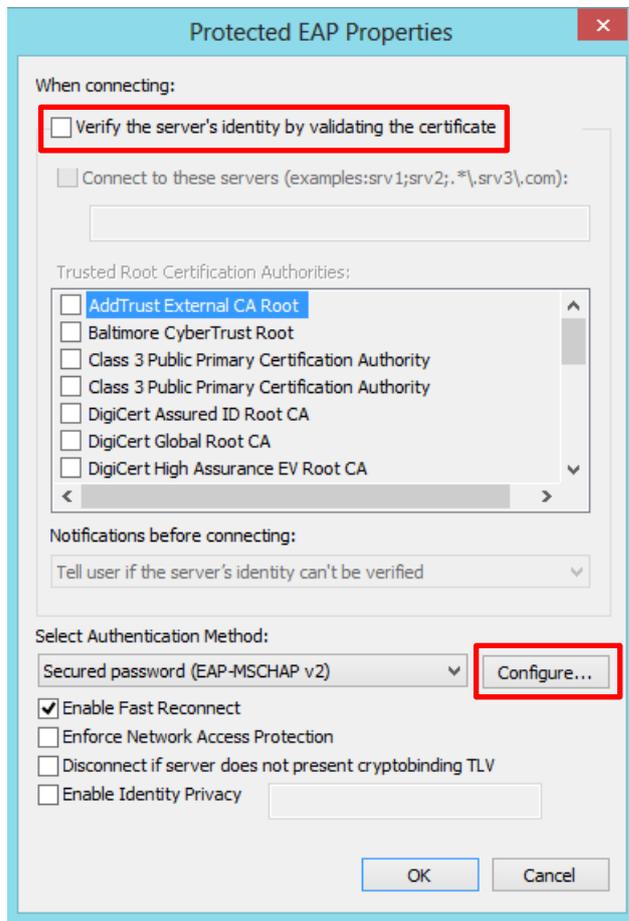
5. Click **“Change connection settings”**.



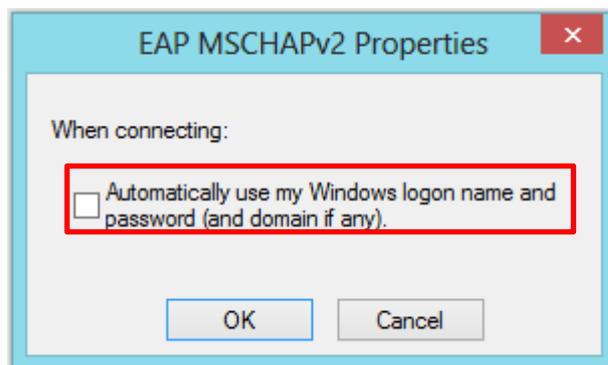
6. Click **Settings** for more settings.



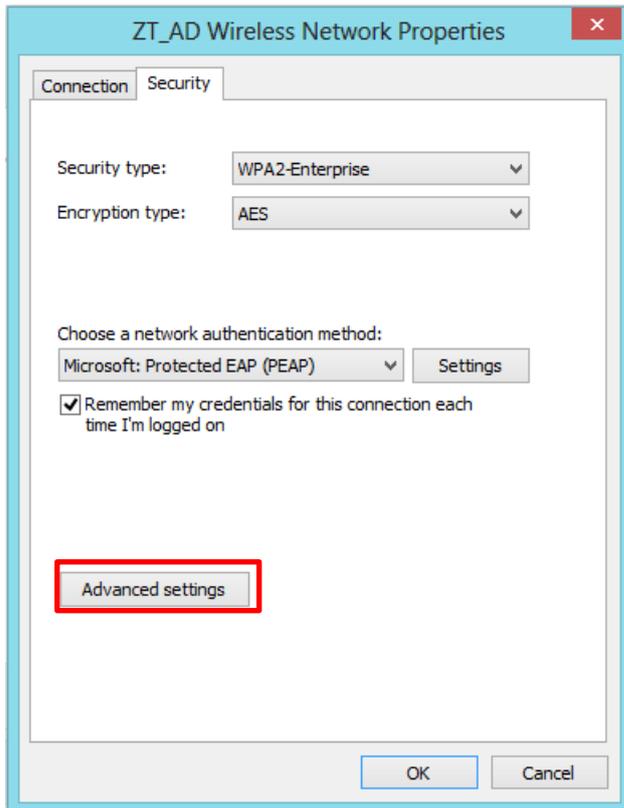
7. Uncheck the “**Validate server certificate**” and then click **Configure...**



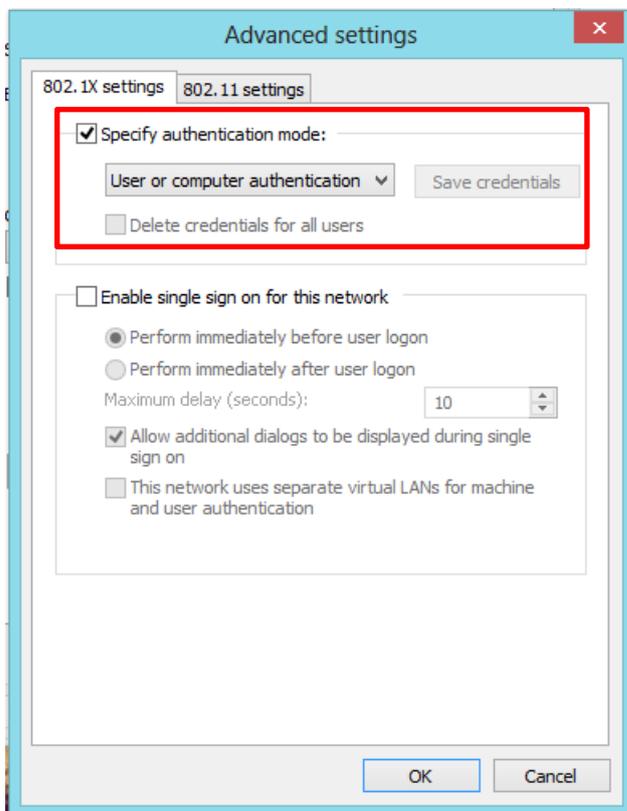
8. Uncheck “**Automatically use my Windows logon name and password (and domain if any).**” Go back to Protected EAP Properties and click “**OK**”.



9. Go to ZT_AD Wireless Network Properties and click “**Advanced settings**”.

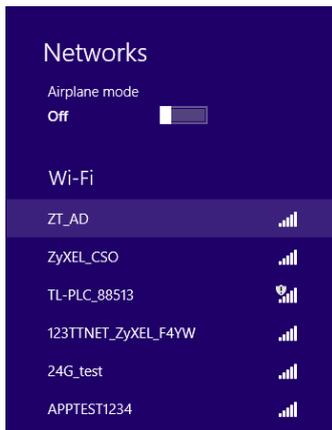


10. Check “specify authentication mode” and select the mode you want.



11. Return to 'Wireless Network Connection', click the SSID you set manually before.

Noted: If the 'Encryption type' setting does not meet the setting on NXC5500, you will see a red cross shown on the picture.



12. Enter the username and password created on Windows server 2008 AD. The wireless authentication will succeed.

