HowTo: User Authentication using DNC-100/DNH-100

[requirements]

DNH-100 with latest firmware (ftp://ftp.dlink.de/dnh/dnh-100/driver_software/)
or
DNC-100 latest firmware (ftp://ftp.dlink.de/dnc/dnc-100/driver_software/)

[scenario]

When logging into the SSID the user should authenticate against an existing LDAP server.
In this Scenario we use a Windows Server 2016 AD + LDAP.
The Domain is "dlink-dce.de", so users usually login by their credentials like
" marcus@dlink-dce.de ".

[preparations]

⇨ Completed installation of DNC-100/DNH-100 with working SSIDs
⇨ Completed installation of LDAP Server

[modification of SSID to use LDAP Authentication]

      a.   Login to your DNC-100/DNH-100

      b.   Navigate into "Configuration > Profile Settings" and select your AP Profile
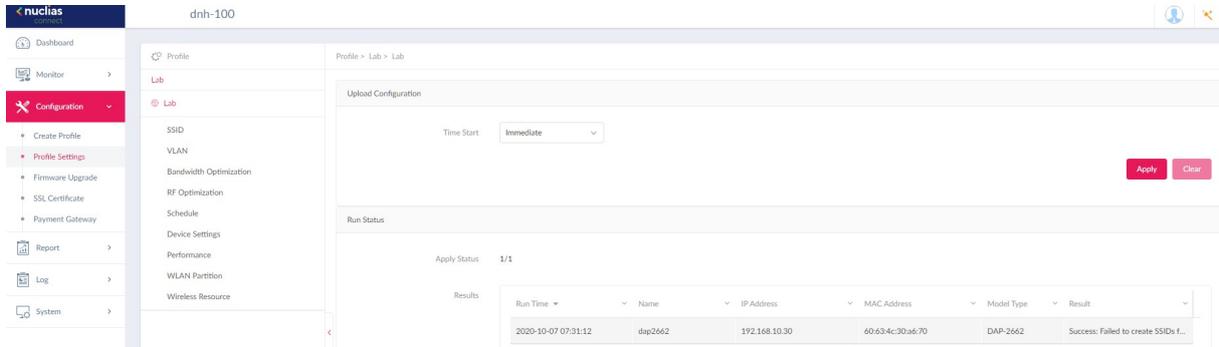
      c.   Select the SSID you want to configure and scroll down to "User Authentication" and select "LDAP"
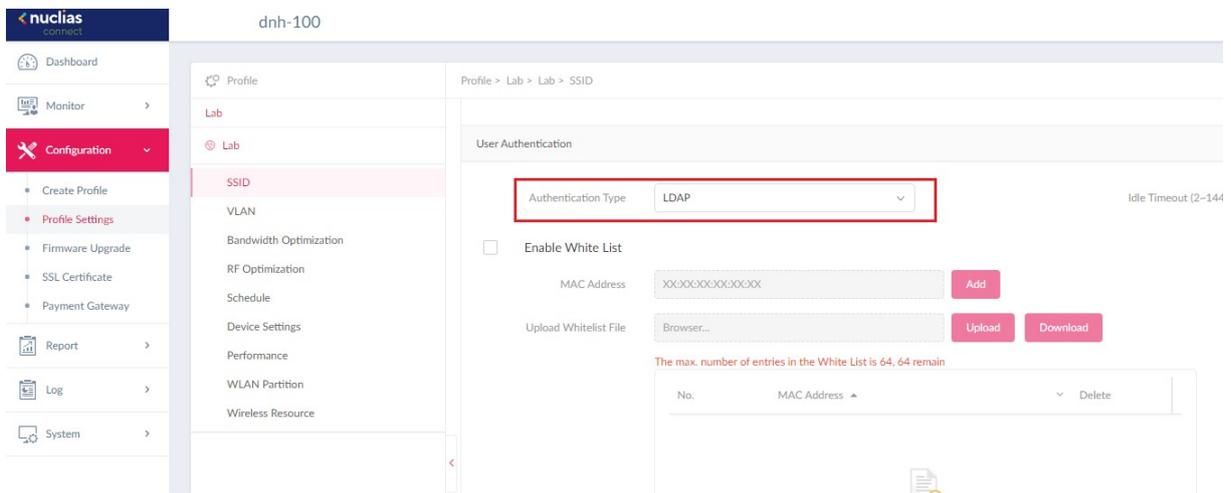
      d.   Scroll down again to "IP Interface Settings"
          i.   You must enable this only when SSID VLAN and Management-VLAN of the AP are different
         ii.   The AP can obtain by DHCP an IP Address or you can define a static IP Address here
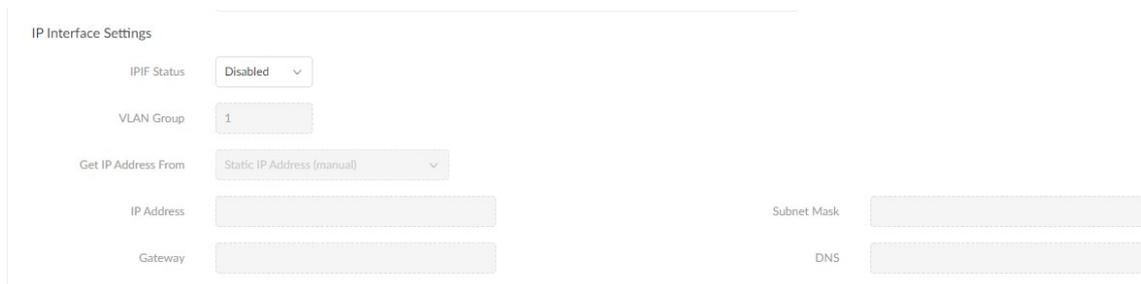
e. Scroll down again to "LDAP" and define your settings depending on your LDAP server
   - i. Server IP   = IP of the LDAP Server
   - ii. Port   = Port defined at the LDAP Server
   - iii. Authentication Mode = Simple (unencrypted) or TLS (encrypted), use this according to your LDAP Server settings
   - iv. Username   = LDAP Administrator username
   - v. Password   = LDAP Administrator password
   - vi. Base DN   = your LDAP's Base DN
        1. In this example its "CN=Users,DC=dlink-dce,DC=de "
   - vii. Acount Attribute = the Attribute you want to use for Authentication
        1. Here you must type in f.e. CN = User or UPN = userPrinicalName, or others according to your LDAP Server
   - viii. Identity   = the full authentication string
        1. You can enable "Auto Copy" when you use the CN

Configuration example using UPN authentication, so user must login with

UPN = " marcus@link-dce.de "

LDAP

Server*	192.168.10.60
Port*	389
Authentication Mode	Simple
Username*	administrator
Password*	••••••••••••••
Base DN*	CN=Users,DC=dlink-dce,DC=de
	(ou=,dc=)
Account Attribute*	userPrincipalName
	(ex,cn)
Identity*	CN=administrator,CN=Users,DC=dlink-dce,DC=de
	☐ Auto Copy

Configuration example using CN authentication, so user must login with

UPN = " marcus_linde "

Scroll down and save the settings.

Now you need to push the new configuration to the APs
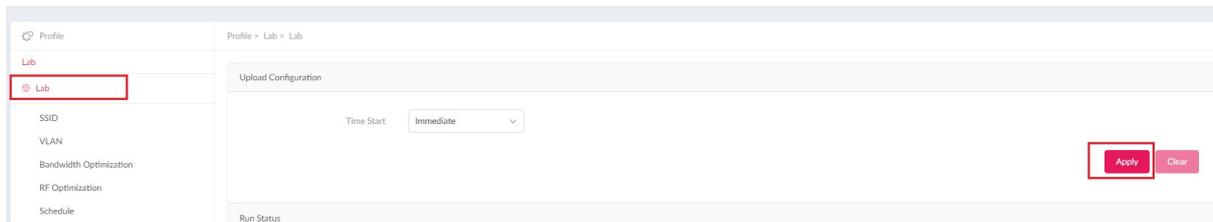
After you have pushed the configuration you now can login into the SSID and authenticate against the AD + LDAP.

If you f.e. choosed CN as authentication attribute, you must enter the FULL Username (in this example it is "marcus_linde" as within the AD stated. You can find this within your AD Settings.
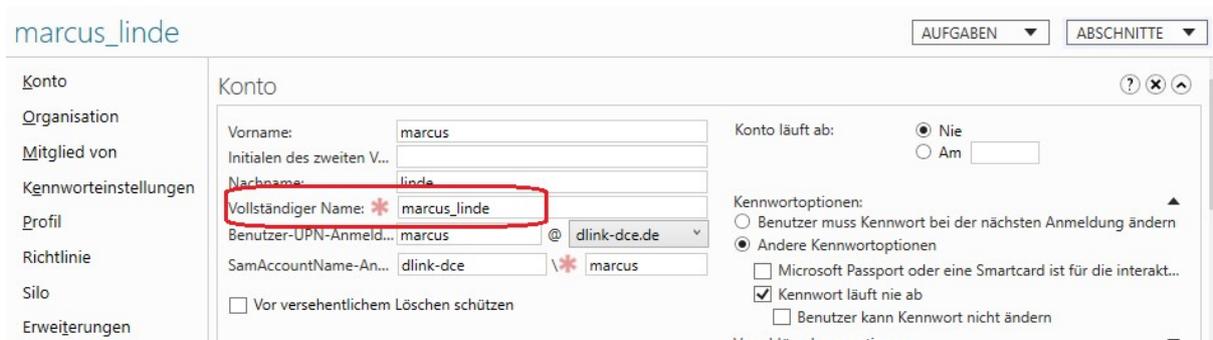
If you f.e. choosed the UPN as authentication attribute, you must enter the FULL UPN authentication (in this example it is "marcus@dlink-dce.de" as within the AD stated. You can find this within your AD Settings.

Additionally you can use the Windows Powershell to check if the users are correct accessible.

For our example type into the powershell following command:

dsquery user -name marcus_linde

dsquery user -name marcus_linde –o upn
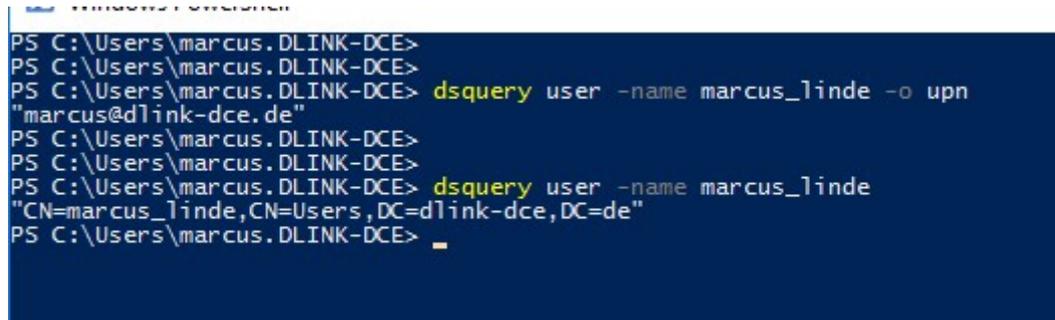
If you type in an value/name which isn't correct you'll not getting an response like in this example.

dsquery user -name marcus