

# Tips for further DNH-100 settings

Version November 2023

## Access Points settings: Tips apart from profile ones

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## 1. Time setting DNH-100

To adjust the time setting switch to **System** menu on the left and then to **Settings**.

Scroll down to **Date and Time**.

(1) Select the **Time Zone**.

(2) Enable **Daylight Saving**.

(3) Time is valid from last **Sunday, March, 2:00 a.m.**  
to last **Sunday in October, 3:00 am**. The time difference is + **1:00 hour**.

(4) Enable **NTP**. The D-Link NTP server is already registered. Optionally, you can specify a second NTP server.

Then click **Save**.

## 2. Time setting Access Points (APs)

To adjust the time setting of AP switch to the **Configuration** menu on the left and then **Profile Settings**.

Go to profile and then **Device Settings**. Scroll down a bit.

(1) Enable **NTP Server**.

(2) Enter the address of an NTP server, e.g. **ntp1.dlink.com**

(3) Select the **Country**.

(4) Select the **Time Zone**.

(5) Enable **Daylight Saving**.

(6) Time is set from **Last Sunday in March** at 2:00 AM to Last Sunday in **October** at 3:00 a.m.

(7) The **DST** offset is **60** minutes.

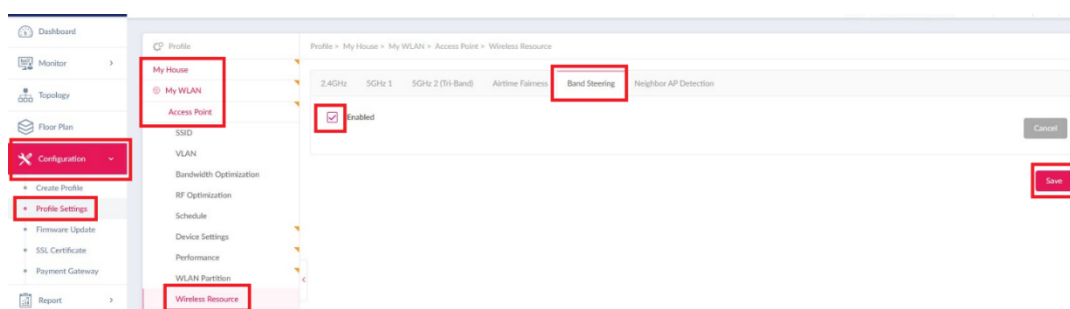
Then click **Save**.

### 3. Activate Band Steering

Band Steering can help to better distribute Wi-Fi clients between the 2.4 and 5 GHz Wi-Fi networks.

In the DNH-100 profile, activate the Band Steering tab under Wireless Resource.

Click **Save**.

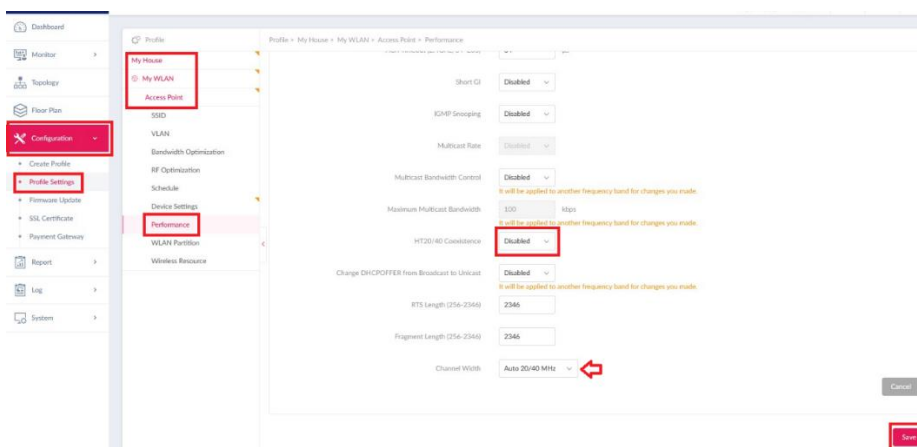


### 4. For 2.4 GHz Wi-Fi, turn off the 20/40 MHz Co-Exist The 20/40 MHz

The 20/40 MHz co-exist is active by default according to the WLAN standard, therefore the 2.4 GHz WLAN is only made available with 20 MHz channel bandwidth if the access point detects other 2.4 GHz WLANs on overlapping frequencies.

Switch to the **DNH-100 profile** and fix the **Performance** at **HT20/40 Co-existence**.

Now the DAP transmits with 40 MHz bandwidth even if WLANs overlap.

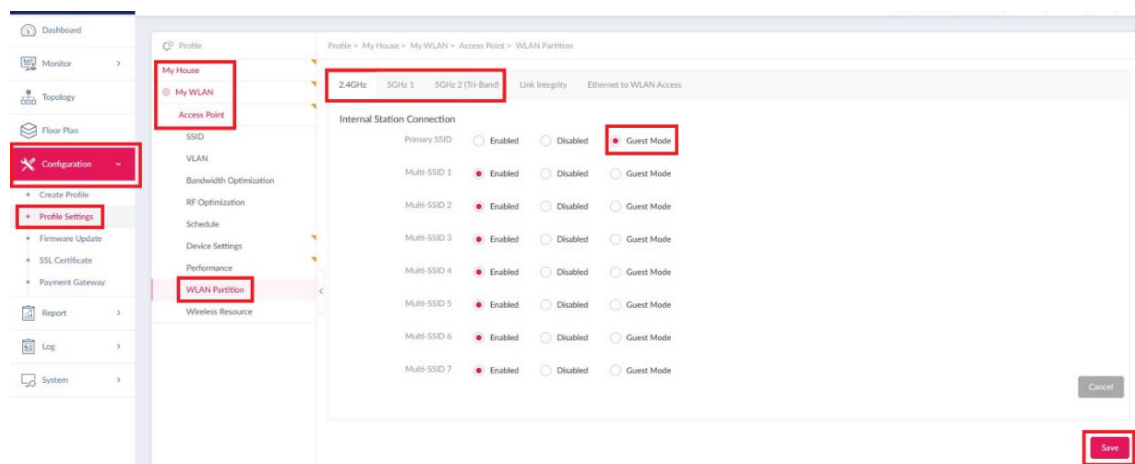


## 5. Guest Mode

Within the DNH-100 profile **Guest Mode** can be activated under **WLAN Partition** for all created SSIDs.

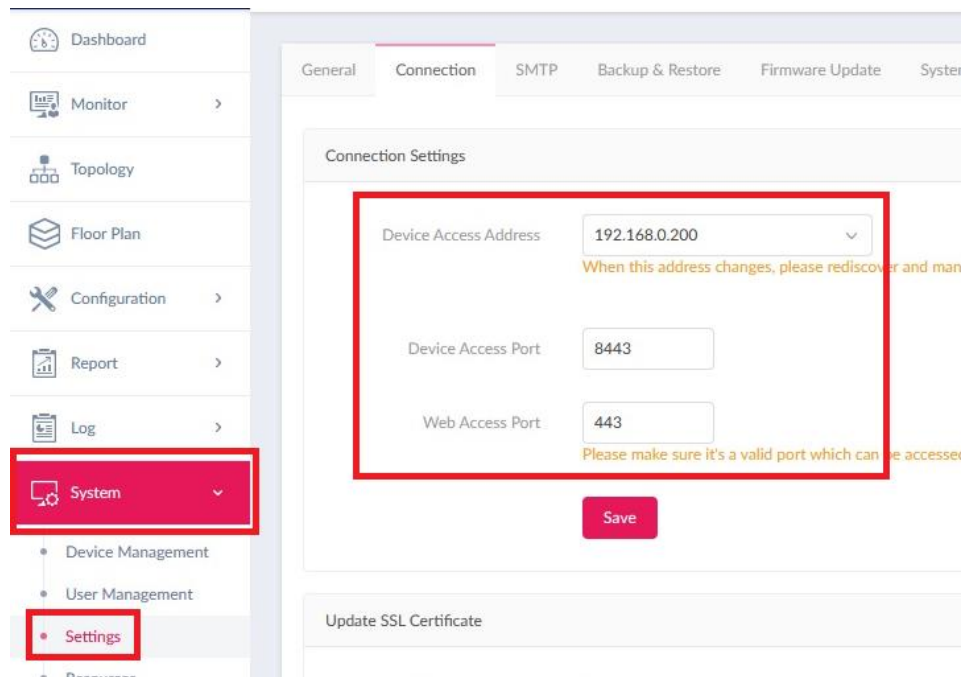
Connected Wi-Fi clients are not connected to each other as known from public Wi-Fi hotspots.

Set the corresponding **2.4 GHz SSID** to **Guest Mode** and click **Save**.  
Then select **5 GHz 1** above and set the same settings, then click **Save**.



## 6. Change the DNH-100 IP-address and its ports

After APs or DGS switches have been integrated into the DNH-100 profiles, do not modify/change the device access address (IP-address) and the device access port of the DNH-100!



The reason gets clear when you open the configuration interface of one of the APs and log in.



Open the **Status – Device Information** menu.

The Nuclias Connect settings can be found in the lower area.

The **Server IP/PORT** shows the IP-address of the DNH-100 and the Access Port.

The IP-address does not change when the DNH-100 is modified.

As consequence of an IP-address change, the APs and DGS switches are offline, as there is no longer a connection to the DNH-100, means these devices are no longer managed by the DNH-100.

The screenshot displays the D-Link DAP-2610 web interface. The left sidebar contains a tree view with 'Status' highlighted. The main content area is titled 'Device Information' and shows various network and system parameters. The 'Nuclias Connect' section at the bottom is highlighted with a red box, showing the connection status and server IP/PORT.

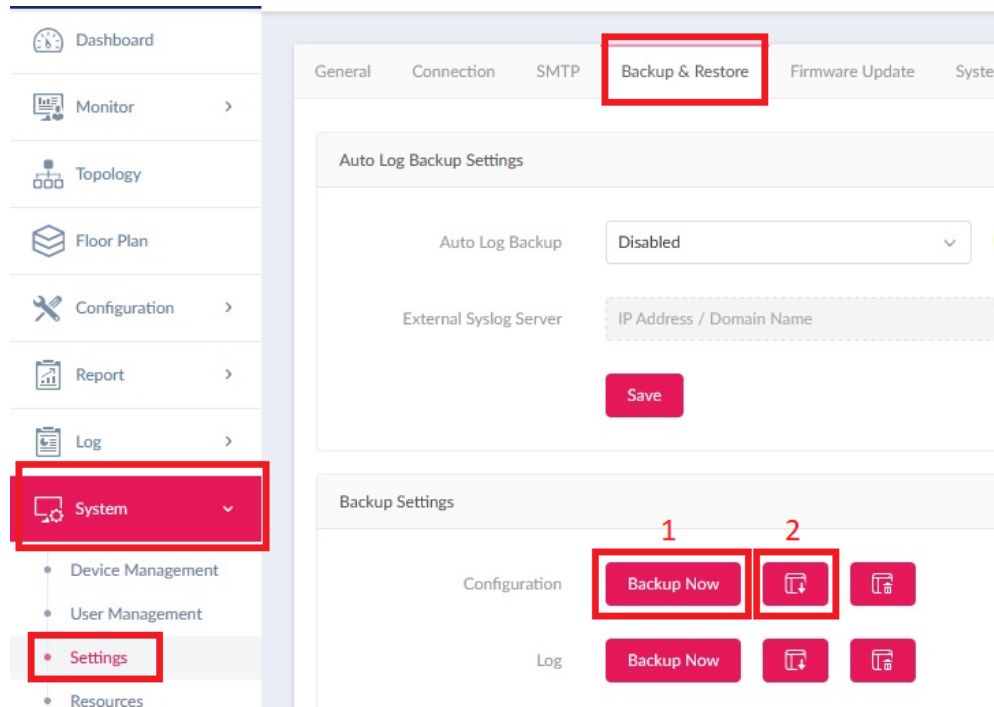
Device Information	
<b>Firmware Version: v2.06B04</b>	
Ethernet MAC Address:	18:0f:76:33:7e:20
Wireless MAC Address(2.4GHz):	Primary: 18:0f:76:33:7e:20
	SSID 1~7: 18:0f:76:33:7e:21 ~ 18:0f:76:33:7e:27
Wireless MAC Address(5GHz):	Primary: 18:0f:76:33:7e:28
	SSID 1~7: 18:0f:76:33:7e:29 ~ 18:0f:76:33:7e:2f
<b>Ethernet</b>	
IP Address	192.168.0.101
Subnet Mask	255.255.255.0
Gateway	192.168.0.1
DNS	192.168.0.1
<b>Wireless (2.4GHz)</b>	
Network Name (SSID)	My_SSID
Channel	11
Data Rate	Auto
Security	WPA2 or WPA3 Personal / AES
<b>Wireless (5GHz)</b>	
Network Name (SSID)	My_SSID
Channel	116
Data Rate	Auto
Security	WPA2 or WPA3 Personal / AES
<b>Device Status</b>	
CPU Utilization	1%
Memory Utilization	36%
<b>Nuclias Connect</b>	
Connection Status	Connect
Server IP/PORT	192.168.0.200:8443
Group ID	56AB-9D302BB0-11EEA312-D3D0

Therefore, the DNH-100 setting should be made before the first integration of other devices.

## 7. Save DNH-100 configuration file

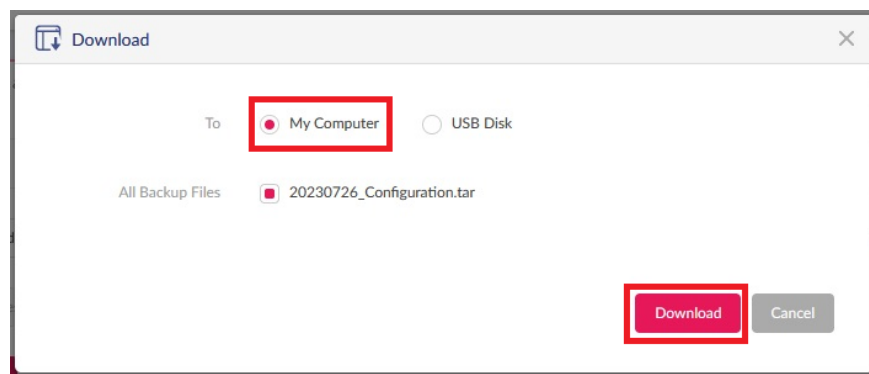
To save the configuration switch to **System-Settings** and click on **Backup & Restore**.

Within the backup settings, click on **Back up now** (1) and then on the **Download** button (2).



To save the file to your PC select **My Computer** and click **Download**.

If **Backup Now** has been clicked before, this config file is also listed. The file name date indicates the latest config file.





## 8. DNH-100 firmware version and other information

Under **System - About** menu the installed DNH-100 firmware version is visible.

The screenshot shows the D-Link DNH-100 web interface. On the left sidebar, the 'System' menu is expanded, and the 'About' option is highlighted with a red box. The main content area is titled 'System Information' and displays the following details:

- Device Name : DNH-100-2EA9
- FW Version : 1.2.1.5
- HW Version : A1
- Nuclias Connect Version : 1.2.1.5
- Single Sign-On (SSO) Status : Enabled
- DDPv5 Client Version : 1.0.0.18
- Web Access Port : 443
- IP Mode : Static
- IP Address : 192.168.0.200
- Netmask : 255.255.255.0
- Gateway : 192.168.0.1
- DNS1 : 192.168.0.1
- DNS2 :
- MAC Address : ecaad8e0c12ea9
- System Usage : 13.9G / 831.7M
- MicroSD Usage : n/a (The MicroSD slot is empty. Please insert the MicroSD card.)
- USB usage : n/a
- Console : SSH
- Console Timeout : 5 minutes
- NTP : Enabled, ntp1.dlink.com
- Time : 2023-07-26 13:59:27
- Timezone : (GMT+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna
- Daylight Saving (DST) : Disabled
- DST Start :
- DST End :
- DST Offset :

Please make sure that the latest firmware version of the DNH-100 is installed after the initial setup. You can download the latest version from the following websites:

<https://www.dlink.com/de/de>

<https://www.dlink.com/be/fr>

<https://www.dlink.com/be/nl>

<https://www.dlink.com/nl/nl>

## 9. Single Sign-On (SSO)

With Single Sign-On, the DNH-100 can be connected to the **Nuclias Connect Portal**.

Please note that this does not allow the DNH-100 to be used as a wireless controller in the Cloud.

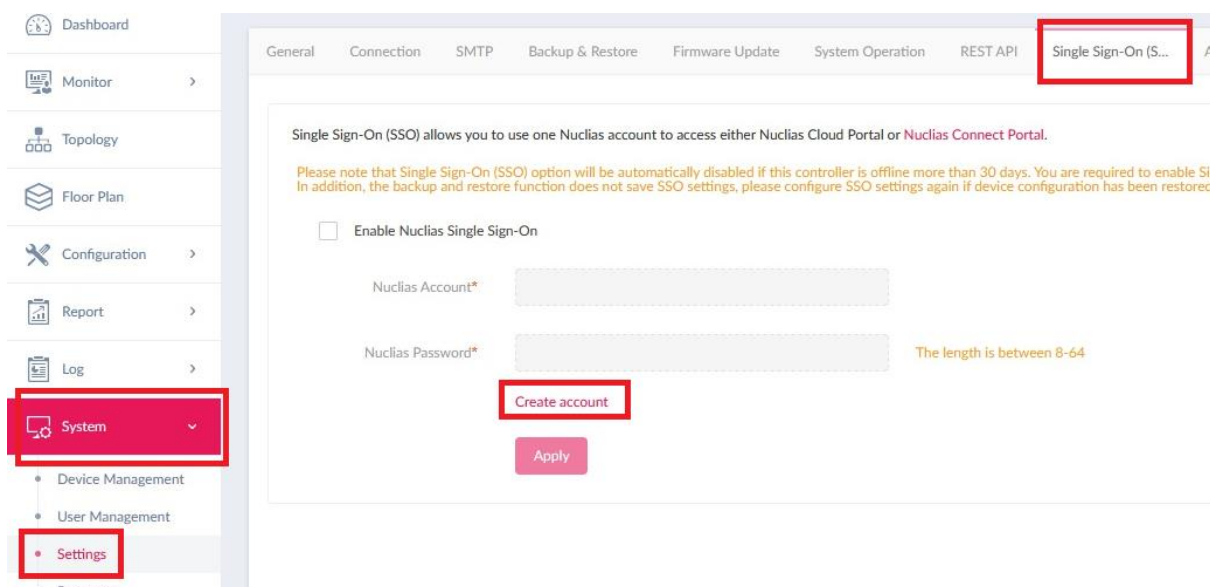
The configuration of the DNH-100 can be accessed from outside via the Nuclias Connect Portal.



#	Status	Name	Host	Sites	Networks	Devices	Clients	Version	Actions
1	<span style="color: green;">●</span>	DNH-100-2EA9	192.168.0.200.95.222.22.69	1	1	1/1	0	1.2.1.5	<span style="border: 1px solid red; padding: 2px;">LAUNCH</span> <span>FORGET</span>
2	<span style="color: green;">●</span>	inis_DNH-100	192.168.0.200.82.83.209.94	17	17	14/14	25	1.2.1.5	<span>LAUNCH</span> <span>FORGET</span>

Now go to the DNH-100 **System Settings** menu and then to **Single Sign-On (SSO)** and tab at the top.

If you do not have a Nuclias Connect Portal account, yet click on **Create Account**.



Dashboard
Monitor
Topology
Floor Plan
Configuration
Report
Log
System
Device Management
User Management
Settings

General
Connection
SMTP
Backup & Restore
Firmware Update
System Operation
REST API
Single Sign-On (SSO)

Single Sign-On (SSO) allows you to use one Nuclias account to access either Nuclias Cloud Portal or Nuclias Connect Portal.

Please note that Single Sign-On (SSO) option will be automatically disabled if this controller is offline more than 30 days. You are required to enable SSO. In addition, the backup and restore function does not save SSO settings, please configure SSO settings again if device configuration has been restored.

☐ Enable Nuclias Single Sign-On

Nuclias Account\*

Nuclias Password\*  The length is between 8-64

Create account

Apply

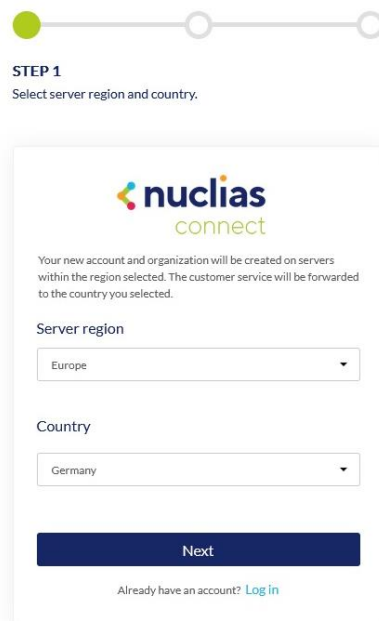
Follow the instructions.

### Important:

You will then receive a confirmation link for the account creation by e-mail. The account can only be used after a click on the confirmation link.

Check the SPAM folder of your E-mails if necessary.

Follow the steps in the Nuclias Connect Portal to complete the setup of your Nuclias Connect Portal account.



**STEP 1**  
Select server region and country.

**nuclias connect**

Your new account and organization will be created on servers within the region selected. The customer service will be forwarded to the country you selected.

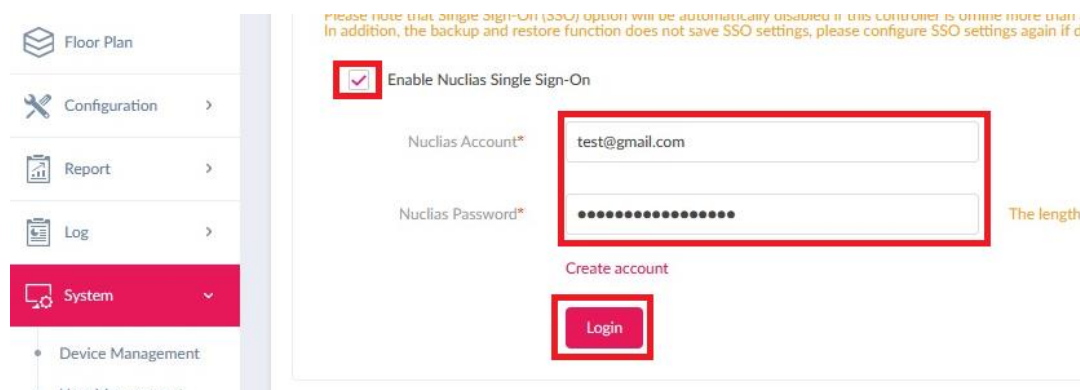
Server region  
Europe

Country  
Germany

Next

Already have an account? [Log in](#)

Select the DNH-100, tick the **Enable Nuclias Single Sign-On** checkbox and then enter the data of the portal account you created before.



Please note that single sign-on (SSO) option will be automatically disabled if this controller is online more than 24 hours. In addition, the backup and restore function does not save SSO settings, please configure SSO settings again if it is required.

☒ Enable Nuclias Single Sign-On

Nuclias Account\* test@gmail.com

Nuclias Password\* .....

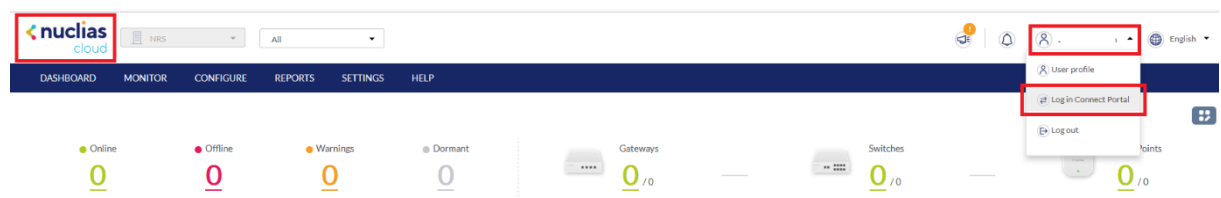
Create account

Login

The length

Click on the **Nuclias Connect Portal** link or open in your web browser:  
<https://connect.nuclias.com/#/login>

If the Nuclias **Cloud** is visible, then switch to Nuclias Connect Portal. Click on your profile in the upper right corner and then on **Log in Connect Portal**.



You are now logged in the Nuclias Connect Portal.  
 Click on **Launch** to get access to your DNH-100.

#	Status	Name	Host	Sites	Networks	Devices	Clients	Version	Actions
1	Online	DNH-100-2EA9	192.168.0.200.95.222.22.69	1	1	1/1	0	1.2.1.5	<b>LAUNCH</b> FORGET
2	Online	inis_DNH-100	192.168.0.200.82.83.209.94	17	17	14/14	25	1.2.1.5	LAUNCH FORGET

## Important:

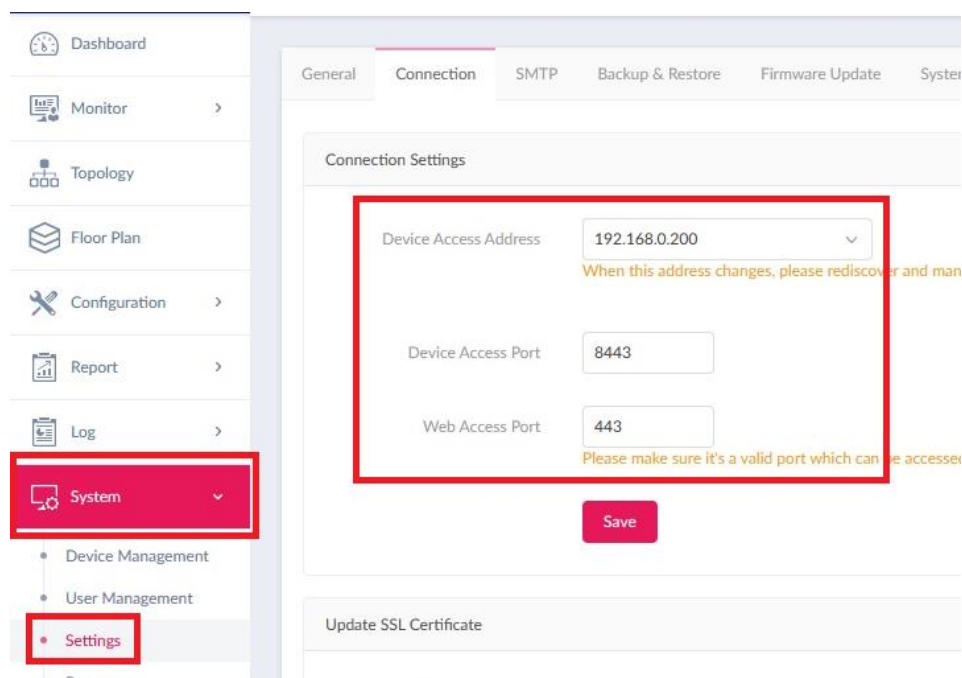
Now your DNH-100 can be accessed from the Internet. In addition, the DNH-100 may require port sharing/port forwarding in the router.

In the DNH-100 **System - Settings** you can now see and change the TCP port under **Web Access Port**.

In order for the DNH-100 to be accessible from the Internet, the TCP port for the DNH-100 IP address must be activated / enabled in the router.

A change of the Web access port does not require a change in the settings of the devices integrated in the DNH-100.

If you change the port, e.g. to 4434, the configuration IP-address of the DNH-100 is then (here in the example) set to **https://192.168.0.200:4434**

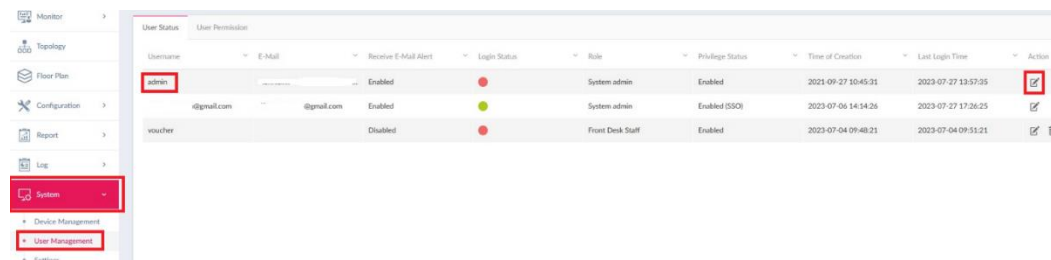


## 10. E-mail functions

The DNH-100 can log some information and/or send it to you via e-mail.

In the DNH-100, go to the **System – User Management** menu.

For the username **admin** click on the **edit** button on the right.

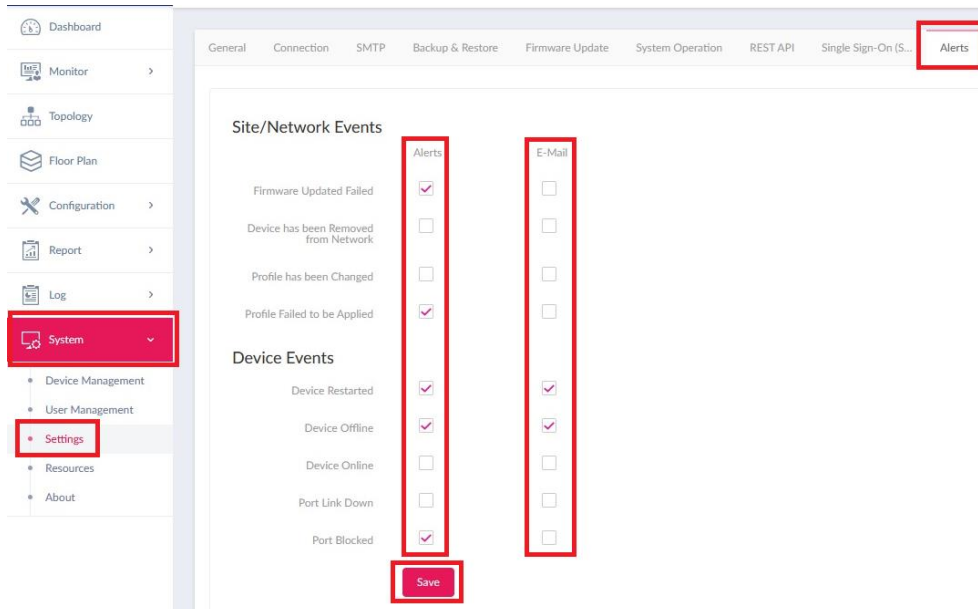


Enter your E-mail address and click **Save**.

The screenshot shows the 'User Modifications' dialog box. It contains the following fields and options:

- Username\*: admin
- Password\*:
- E-Mail\*: Email-Adresse
- Receive E-Mail Alert: ☒ Enabled ☐ Disabled
- Privilege\*: System admin
- Privilege Status\*: ☒ Enabled ☐ Disabled
- Location:
- Telephone:
- Description:
- Buttons: Save (highlighted with a red box), Cancel

At **System – Setting** under the **Alerts tab** you can specify what should be logged and what should be sent as an e-mail.

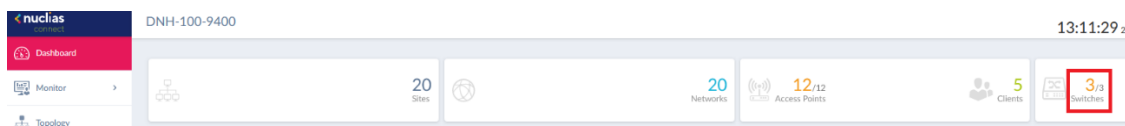


For the setup of the e-mail feature and what you have to attend for e-mail provider, please see the manual:

[https://ftp.dlink.de/dnh/dnh-100/documentation/DNH-100\\_howto\\_reva\\_Email\\_en.pdf](https://ftp.dlink.de/dnh/dnh-100/documentation/DNH-100_howto_reva_Email_en.pdf)

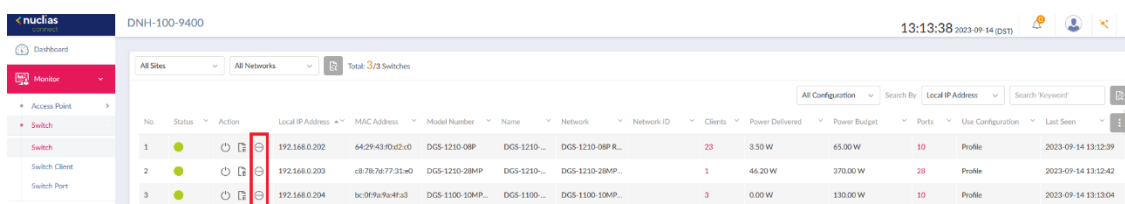
## Tips for the switch, apart from the profile settings

In the **Dashboard** click on the displayed number of connected switches.



A list of all integrated switches is visible.

Click on **Link to Device Page** button of the switch you want to configure.

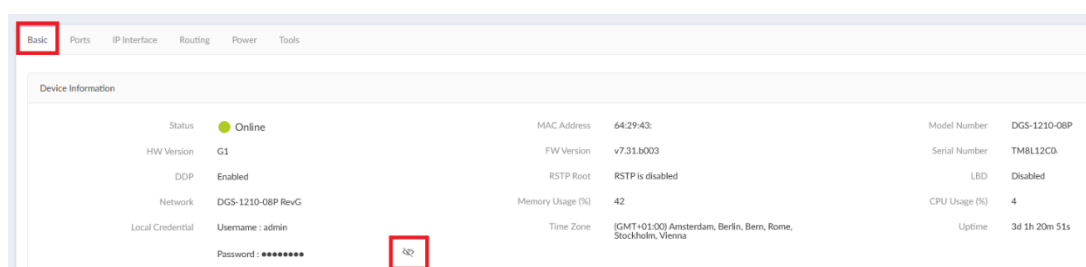


Please note that the settings may differ slightly depending on the switch model or some settings may not be available.

## 11. Switch – Reading information of the switch

In the **Basic** tab you'll find switch information, e.g.

- the admin password (click on the eye to display it)
- the firmware version
- the MAC address
- the serial number





## 12. Switch – Change IP-address

In the **Basic** tab scroll down. Here you can change the switch IP settings.

If you have made any changes to the settings, click **Apply**.

IP Connect

Type: ☐ DHCP ☒ Static IP

Local IP Address\*: 192.168.0.202

VLAN\*: 1 10 member ports belonging to this VLAN currently.

Netmask\*: 255.255.255.0

Gateway\*: 192.168.0.10 This setting will be synchronized to the primary default route in Routing page accordingly.

Primary DNS\*: 192.168.0.10

Secondary DNS:

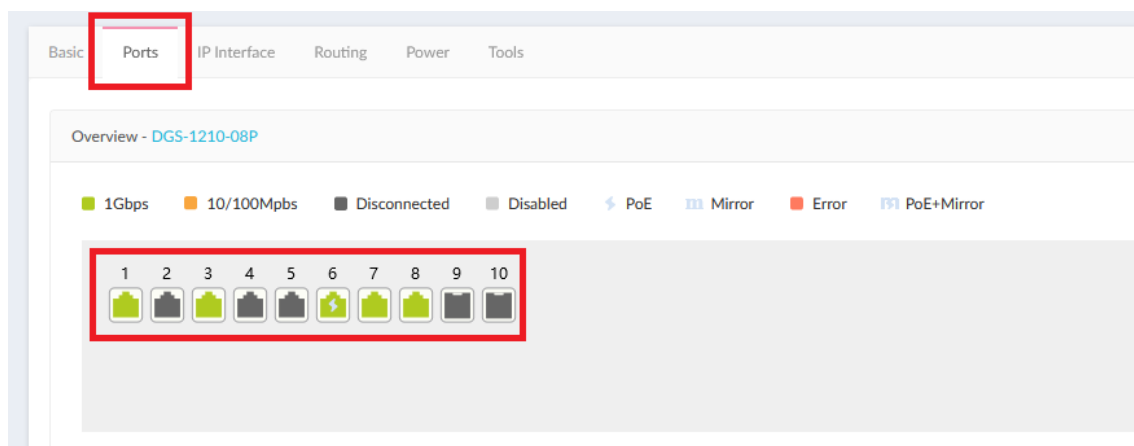
Third DNS:

Apply

## 13. Read LAN port information

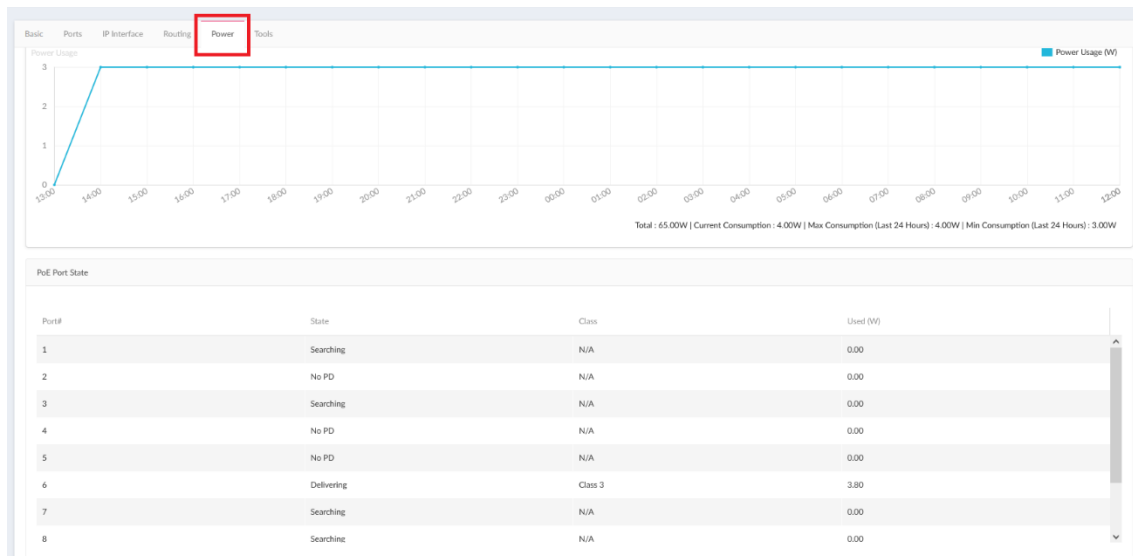
In the **Ports** tab you'll find information about the LAN ports of the switch.

If you click on one of the ports, you will get more information about the port.



## 14. Reading PoE information

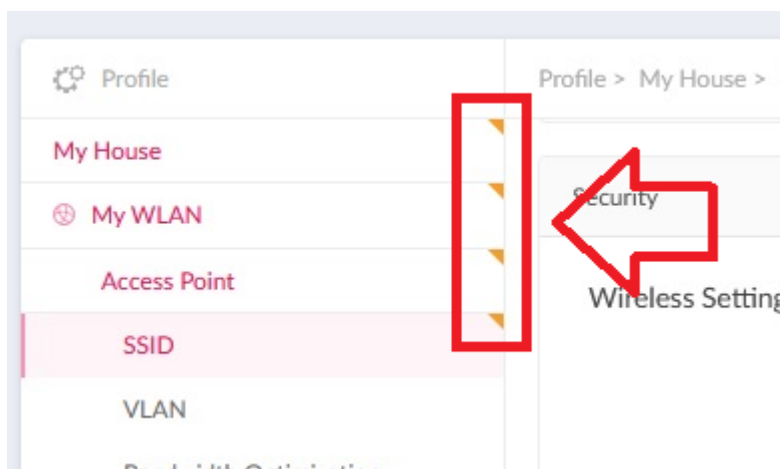
In the **Power** tab you'll find information about PoE.



## 15. Transferring settings to the access point / switch

Whenever you have made settings in the DNH-100 profile, they are not yet transferred/active in the APs and switches.

An **orange** icon is displayed if settings have not yet been transferred to the APs or switches.



Click on the **Site-Network** name.

Select **Immediate** and then click **Apply**.

The screenshot shows the 'Profile' section on the left with 'My WLAN' selected. The main area is titled 'Profile > My House > My WLAN' and contains an 'Upload Configuration' section. A note states: 'Please note that the network will be unstable during the configuration.' Below this, the 'Time Start' dropdown is set to 'Immediate'. The 'Apply' button is highlighted with a red box.

Settings are now transferred to the APs and **Success** should be displayed.

The screenshot shows the 'Run Status' section. The 'Apply Status' is 1/1. The 'Results' table has columns: Run Time, Name, IP Address, MAC Address, Model Number, and Result. The first row shows a successful configuration for 'dap2610' at 2023-07-26 13:42:32. The 'Success' status in the 'Result' column is highlighted with a red box.

Run Time	Name	IP Address	MAC Address	Model Number	Result
2023-07-26 13:42:32	dap2610	192.168.0.101	18-0f-76:33:7e:20	DAP-2610	Success

After a few seconds the access point settings are active.

Depending on the changed setting, it may take a little longer.

For example, if the APs in the 5 GHz use a DFS channel (100-140), it takes up to five minutes for the 5 GHz WLAN to be available because of the DFS method.

A switch usually reboots when settings are transferred to it.

This will also take a few minutes

During this time, the power supply of the switch to which the PoE devices are connected is not available.

Please see also the following manuals

**Basic Setup of the DNH:**

[https://ftp.dlink.de/dnh/dnh-100/documentation/DNH-100\\_howto\\_reva\\_Grundrichtung\\_de.pdf](https://ftp.dlink.de/dnh/dnh-100/documentation/DNH-100_howto_reva_Grundrichtung_de.pdf)

**The Nuclias Connect app:**

[https://ftp.dlink.de/dnh/dnh-100/documentation/DNH-100\\_howto\\_reva\\_NucliasConnectApp\\_de.pdf](https://ftp.dlink.de/dnh/dnh-100/documentation/DNH-100_howto_reva_NucliasConnectApp_de.pdf)

For further manuals please visit our FTP server

<https://ftp.dlink.de/dnh/dnh-100/documentation/>

and our websites

<https://www.dlink.com/de/de>

<https://www.dlink.com/be/fr>

<https://www.dlink.com/be/nl>

<https://www.dlink.com/nl/nl>