

CENTRALISED NETWORK MANAGEMENT

Nuclias Connect is an intuitive network management solution for network administrators seeking a flexible, hands-on approach to their infrastructure and user data. It's **Network Management, Refreshed**

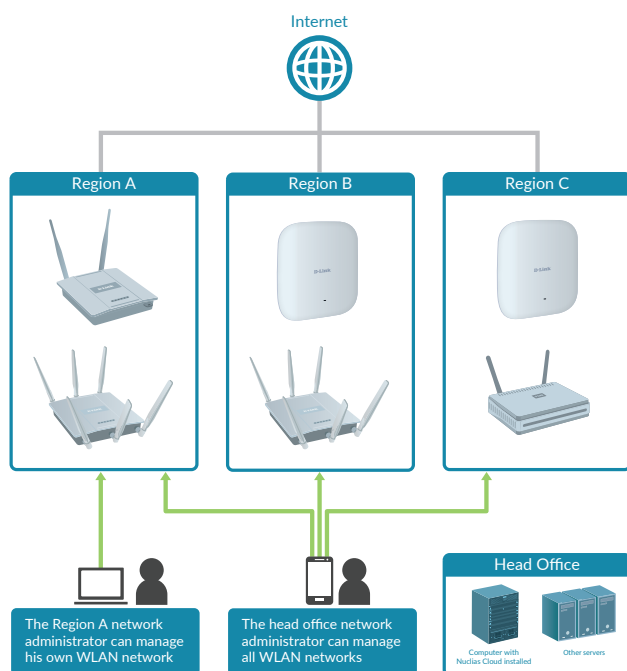
Built For...

- SMBs
- Retail Chains
- Hospitality
- Education

Nuclias Connect

Centralised management solution for wireless networks. Nuclias Connect makes it easier to analyse, automate, configure, optimise, scale, and secure your network — delivering the convenience of an Enterprise-wide management solution, without the cost.

Deployable on a Windows server (or Linux via Docker), PC, or Smartphone (via lite management app) the Nuclias Connect free-to-download software is capable of managing up to 1,000 Access Points (APs) without licensing charges, coupled with inexpensive optional hardware controllers (DNH-100 Nuclias Connect Hub and DNH-200 Nuclias Connect Hub Plus with NVR) suitable for remote locations.



Through software-based monitoring and remote management of all wireless Access Points (APs) on your network, Nuclias Connect offers tremendous flexibility compared to traditional hardware-based unified management systems. Configuration can be done remotely. Network traffic analytics are available at a glance (in whole or in part). Load Balancing, Airtime Fairness, and Localised Throttling are enabled.

Why Nuclias Connect?

Nuclias Connect is designed to meet the specific needs of SMBs/SMEs looking to...

- » Minimise network administration burden and costs.
- » Carry out Digital Transformation initiatives without unduly adding to their network administration workload.
- » Provide a robust and seamless Guest/Public Wi-Fi experience for users on par with what Enterprises can offer.

Who Needs Nuclias Connect?

SMBs/SMEs

- » Offers a robust yet affordable foundation for Digital Transformation initiatives.

Retail Chains

- » Provides analytics that translate into customer behavioral insights.

Hospitality

- » Helps transform your operations and provide a premium-grade Wi-Fi experience for customers.

Education

- » Offers robust Wi-Fi capability and fine-grained management control, affordably.



Nuclias Connect Hub (DNH-100)

Why You Want It

Nuclias Connect gives you the financial and technical flexibility to expand from a small network to a larger one (up to 1,000 APs) while retaining a robust and centralised management system. And with its intuitive Graphical User Interface (GUI), a wealth of enhanced AP features, and a setup wizard that supports 11 languages, Nuclias Connect minimises the hassle of deployment, configuration, and administration tasks, with the key benefits falling into these areas:

Value

Nuclias Connect is a tremendous value. Its Access Points (APs) are license-free. Its management software is free to download to any compatible PC and is backwards-compatible with several of D-Link APs, and its dedicated hardware controller is inexpensive, all while providing a comprehensive set of technical features that reduce admin costs, and that are suitable for most SMB networking activities.

Benefits to You

- » Management software can be installed on as many terminals as you want.
- » Less costly network expansion thanks to centralised configuration and license-free Access Points (up to 1,000 APs).
- » Less costly network administration thanks to easy intuitive free-to-download software.

Flexibility

Nuclias Connect offers the flexibility to thrive in a variety of deployment scenarios, business needs, and use cases. The solution can utilise legacy equipment if needed (PCs and select access points), or be implemented as a total solution. A wide variety of Access Points are available for various conditions and price points. And the management software is customisable, and enables control and analytics of a broad or fine granularity – and presentation in a variety of formats.

Benefits to You

- » Suited to deployments with varied conditions on the ground.
- » Network can be managed from anywhere with an Internet connection.
- » Public Wi-Fi Login can be customised with your logo.
- » Display, analytics, reporting, and management can be customised in a variety of ways for utility or convenience.
- » Multiple tenants can manage through the software.

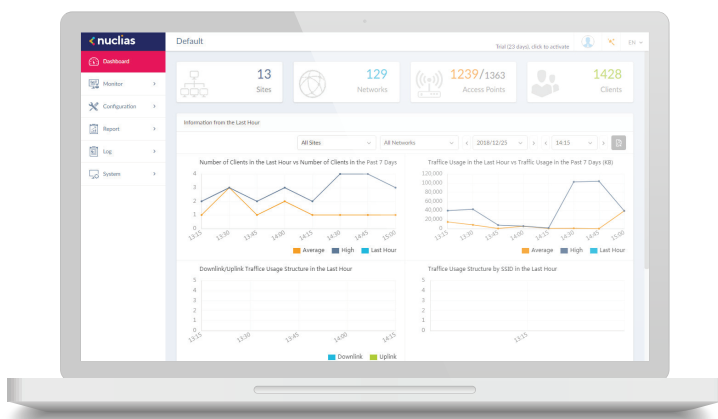


Real-Time Analytics & Automated Reporting

Nuclias Connect enables an extensive understanding of your network and its users through traffic analytics and status reports, which can be viewed at a glance. Insights derived from this traffic data can be used to create business value. Traffic can be viewed across the entire network, to the level of a single AP.

Benefits to You

- » Gain visibility into the network to substantiate traffic to evaluate capacity and growth.
- » Analytics provide actionable intelligence whereby businesses can take appropriate actions.
- » Spot irregularities.
- » Gain insights into customers/users.
- » Easier troubleshooting.



Security & Privacy

Nuclias Connect is designed for businesses where concerns about security and privacy are paramount. All communications over Nuclias Connect are encrypted (WPA2 or WPA3). User data never leaves your possession. And additional security measures (such as firewalls) can be added without undue difficulty.

Benefits to You

- » End-to-End encryption.
- » User data remains private.
- » Security add-ons are no problem.

Ease-of-Use

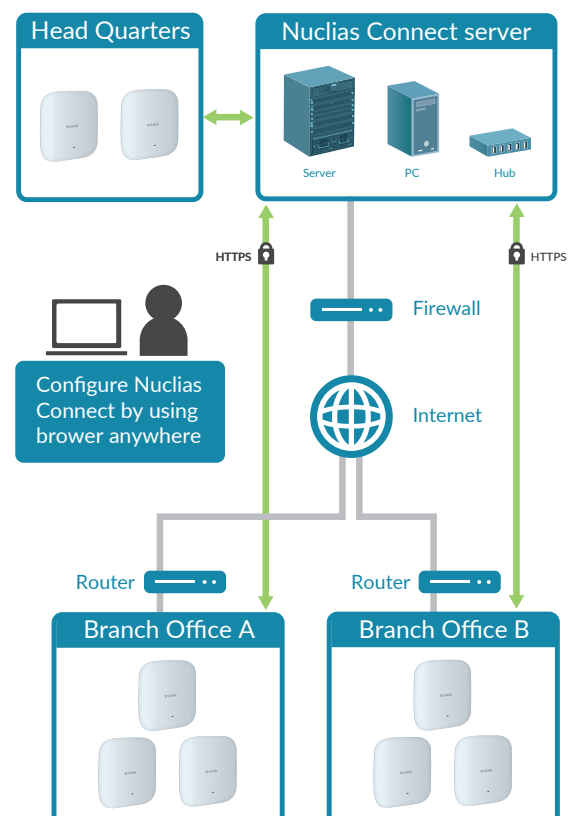
Nuclias Connect's centralised management capabilities, easy setup, and intuitive dashboard functionality make life easier for network administrators, while its functionality makes life easier for network users.

Benefits to You

- » Customisation features mean less need to "dig around" inside the software.
- » Convenient access from anywhere with Internet connectivity.
- » Centralised configuration reduces the chance of error.
- » Batch configuration, automated network management & reporting, and searchable & auditable Event and Change logs save time.
- » Diverse authentication options (Captive Portal, RADIUS Server, POP3, LDAP, AD) save effort.

Benefits to Guest Users

- » Payment Gateway Integration with the Captive Portal.
- » Airtime Fairness & Load Balancing to ensure service integrity.
- » Front-desk Ticket Management for greater convenience.



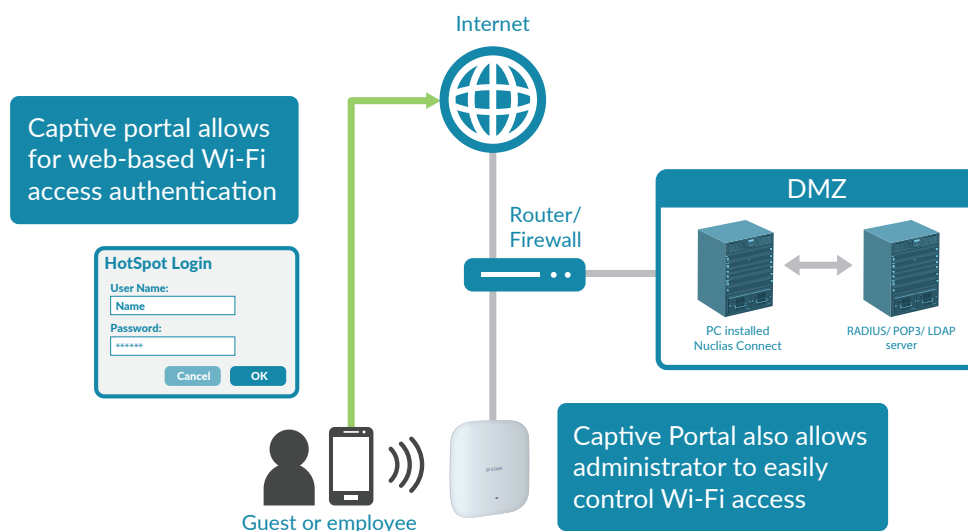
Nuclias Connect For Admins

Nuclias Connect supports multi-tenancy, so network admins can grant localised management authority for local networks. In addition, because APs can support 8 SSIDs per radio (16 SSIDs per dual-band AP), administrators have the option of using one SSID to create a guest network for visitors.

Nuclias Connect provides direct AP discovery and provisioning when it shares the same Layer-2/Layer-3 network with a given AP, allowing users to find APs and import profiles with minimum effort, which can be applied as needed to groups or individual APs for even more effective configuration.

Since Nuclias Connect's software operates transparently on the network, an AP can be deployed anywhere in a NAT environment. Admins can provide & manage a variety of distributed deployments, including setting & admin account configuration for each deployment.

Nuclias Connect allows for multiple user authentications while enabling specific access control configurations for each SSID, giving admins the option of configuring separate internal networks for different subnets, while allowing more advanced Value-Added Services, such as Captive Portal or Wi-Fi Hotspot.



Key Features



Free-to-Download
Management Software



Inexpensive Hardware
Controller



Searchable Event Log
and Change Log



License-Free Access
Points



Traffic Reporting
& Analytics



Authentication via Customizable
Captive Portal, 802.1x and
RADIUS Server, POP3, LDAP, AD



Backwards-
Compatibility



Remote Config. &
Batch Config.



Multilingual
Support



Intuitive
Interface



Multi-Tenant & Role-Based
Administration



Payment Gateway (Paypal)
Integration and Front-Desk
Ticket Management






Technical Specifications



WLAN Management	Nuclias Connect	Nuclias Connect Hub (DNH-100)
Maximum APs	1000 ¹ (large scale installations) 100 ¹ (small scale installaions)	100
WLAN Management Features	AP grouping, multi-tenancy, visualised topology, NAT pass-through, setup wizard, AP discovery (layer 2 and layer 3), report system	
User Authentication		
Guest Portal	Captive portal	
Authentication Method	802.1x, RADIUS, Local DB, external RADIUS, LDAP, POP3, Wi-Fi passcode, AD Local DB, external RADIUS, NAP	
Hotspot Features	Built-in support for voucher-based authentication Built-in hotspot manager for voucher creation and guest management Rate limiting and bandwidth control for guest and hotspot portal	
Wireless Features		
RF Management and Control	Auto output power control, auto channel, self-healing around failed APs	
Multiple SSIDs per Radio (AP)	8	
Advanced Wireless Features	Band steering, L2 roaming, bandwidth optimisation, airtime fairness	
System Management		
Management Interface	Web-based user interface (HTTPS)	
Minimum System Requirements	Computer running Microsoft Windows 10 or server 2016 (64 bit)	
Scheduling	Firmware update, configuration update	

¹ Number of wireless access points supported depends on the specification of the computer on which DNC is installed. To support 1000 APs, a computer with at least an Intel Core i7 with 16 GB RAM and 4 TB hard drive, and 20 Mbps uplink bandwidth is recommended. To support 100 APs, a computer with at least an Intel Core i5 3.2GHz with 8 GB RAM and 2 TB hard drive, and 10 Mbps uplink bandwidth is recommended.

Nuclias Connect Device Compatibility

Nuclias Connect Supported Wireless Access Points					
Model	DAP-2610	DAP-2622	DAP-2662	DAP-2680	DAP-2682
Environment	Indoor	Indoor	Indoor	Indoor	Indoor
Product Image					
IEEE Standard	802.11a/b/g/n/ac Wave 2	802.11a/b/g/n/ac Wave 2	802.11a/b/g/n/ac Wave 2	802.11a/b/g/n/ac Wave 2	802.11a/b/g/n/ac Wave 2
2.4 GHz Speed	400 Mbps	300 Mbps	300 Mbps	450 Mbps	600 Mbps
5 GHz Speed	867 Mbps	867 Mbps	867 Mbps	1300 Mbps	1700 Mbps
Number of SSIDs	16 (8 per radio)	16 (8 per radio)	16 (8 per radio)	16 (8 per radio)	16 (8 per radio)
Ethernet Interface	1 x Gigabit Ethernet	3 x Gigabit Ethernet	1 x Gigabit Ethernet	1 x Gigabit Ethernet	2 x Gigabit Ethernet
PoE	802.3af	802.3at	802.3af	802.3at	802.3at
Max Tx Power	2.4 GHz: 23 dBm 5 GHz: 23 dBm	2.4 GHz: 20 dBm 5 GHz: 20 dBm	2.4 GHz: 26 dBm 5 GHz: 26 dBm	2.4 GHz: 26.5 dBm 5 GHz: 26.5 dBm	2.4 GHz: 16 dBm 5 GHz: 24 dBm
Antenna Type	Internal	Internal	Internal	Internal	Internal
Antenna Gain	2.4 GHz: 3 dBi 5 GHz: 3 dBi	2.4 GHz: 2.8 dBi 5 GHz: 4.1 dBi	2.4 GHz: 3.8 dBi 5 GHz: 3.8 dBi	2.4 GHz: 3.6 dBi 5 GHz: 4.2 dBi	2.4 GHz: 3.7 dBi 5 GHz: 4.8 dBi
Mounting Type	Ceiling/Wall/ Desktop	Wall Plate	Ceiling/Wall/ Desktop	Ceiling/Wall/ Desktop	Ceiling/Wall/ Desktop
Security Lock	Yes	Yes	Yes	Yes	Yes

Nuclias Connect Device Compatibility

Nuclias Connect Supported Wireless Access Points					
Model	DAP-X2810	DAP-X2850	DAP-3315	DAP-3666	DIS-2650AP
Environment	Indoor	Indoor	Outdoor (IPX5)	Outdoor (IP68)	Indoor
Product Image					
IEEE Standard	802.11ax Wi-Fi 6 802.11a/b/g/n/ac Wave 2	802.11ax Wi-Fi 6 802.11a/b/g/n/ac Wave 2	802.11a/b/g/n	802.11a/b/g/n/ac Wave 2	802.11a/b/g/n/ac Wave 2
2.4 GHz Speed	600 Mbps	1200 Mbps	300 Mbps	300 Mbps	300 Mbps
5 GHz Speed	1200 Mbps	2400 Mbps	-	867 Mbps	867 Mbps
Number of SSIDs	16 (8 per radio)	16 (8 per radio)	8	16 (8 per radio)	16 (8 per radio)
Ethernet Interface	1 x Gigabit Ethernet	1 x 2.5 Gigabit Ethernet 1 x Gigabit Ethernet	2 x Fast Ethernet	2 x Gigabit Ethernet	2 x Gigabit Ethernet
PoE	802.3at	802.3at	Proprietary	802.3af	802.3at
DC Power Input	-	-	-	-	12 to 48 V DC dual input
Max Tx Power	2.4 GHz: 23 dBm 5 GHz: 26 dBm	2.4 GHz: 28 dBm 5 GHz: 25.5 dBm	2.4 GHz: 27 dBm	2.4 GHz: 26 dBm 5 GHz: 26 dBm	2.4 GHz: 23 dBm 5 GHz: 23 dBm
Antenna Type	Internal	Internal	Internal Sector	Internal	Internal
Antenna Gain	2.4 GHz: 3.2 dBi 5 GHz: 4.2 dBi	2.4 GHz: 3.5 dBi 5 GHz: 5.5 dBi	2.4 GHz: 12 dBi	2.4 GHz: 6 dBi 5 GHz: 6 dBi	2.4 GHz: 2.5 dBi 5 GHz: 3.0 dBi
Mounting Type	Ceiling/Wall/Desktop	Ceiling/Wall/Desktop	Pole/Wall	Pole	DIN/Wall/Desktop
Security Lock	Yes	Yes	No	Yes	Yes