

CENTRALIZED NETWORK MANAGEMENT

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

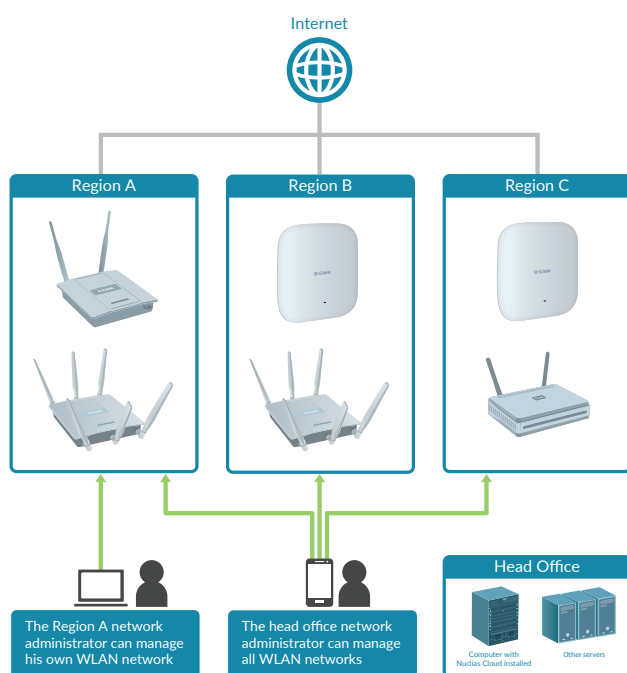
Built For...

- SMBs
- Retail Chains
- Hospitality
- Education

Enter Nuclias Connect

Welcome to the solution guide for Nuclias Connect, D-Link's centralized management solution for Small-to-Medium-Sized Business (SMB) networks. Nuclias Connect makes it easier to analyze, automate, configure, optimize, scale, and secure your network — delivering the convenience of an Enterprise-wide management solution, at an SMB price.

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 an inexpensive optional hardware controller (The Hub) 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 Localized Throttling are enabled.

Why Nuclias Connect?

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

- » Minimize 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.

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 centralized 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 minimizes 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 a number 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 centralized 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 utilize 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 customizable, 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 customized with your logo.
- » Display, analytics, reporting, and management can be customized in a variety of ways for utility or convenience.
- » Multiple tenants can manage through the software.

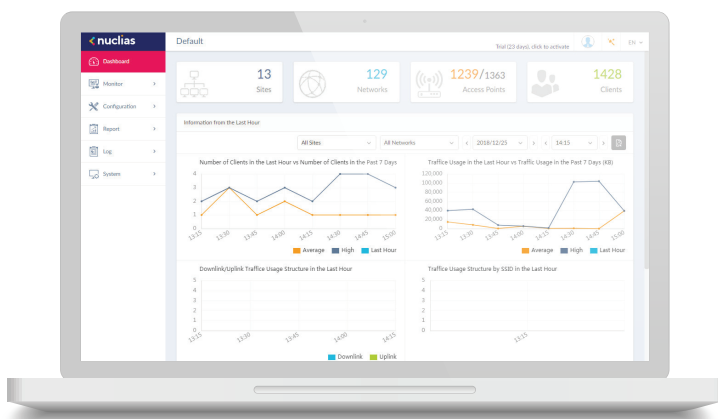


Real-Time Analytics & Automated Reporting

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/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

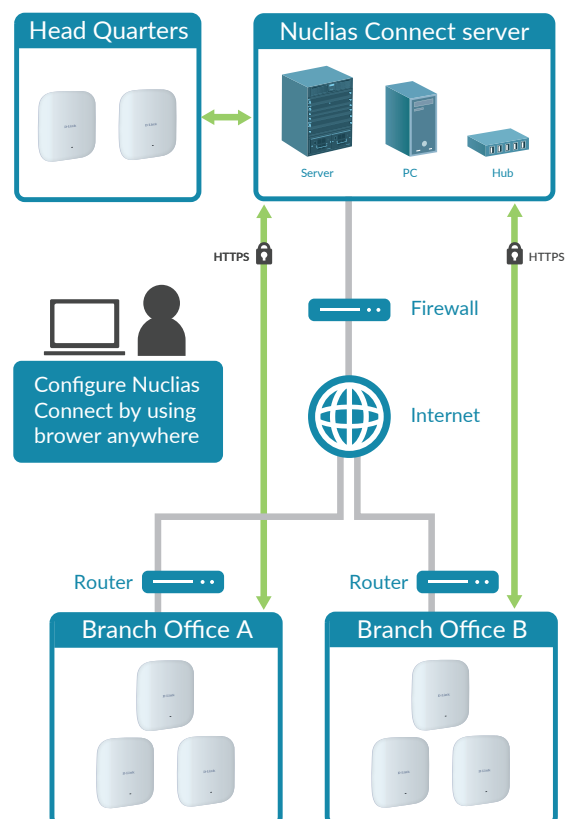
Nuclias Connect's centralized management capabilities, easy setup, and intuitive dashboard functionality make life easier for network administrators, while its functionality makes life easier for network users.

Benefits to You

- » Customization features mean less need to "dig around" inside the software.
- » Convenient access from anywhere with Internet connectivity.
- » Centralized 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.



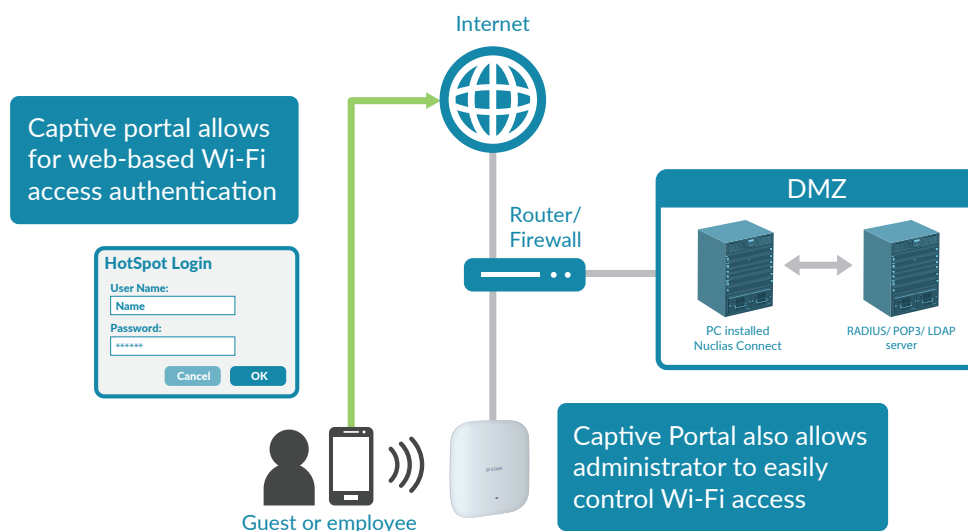
Nuclias Connect For Admins

Nuclias Connect supports multi-tenancy, so network admins can grant localized management authority for local networks. In addition, because APs can support 8 SSIDs per radio (16 SSIDs per dual band APs), 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 enabling 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 | |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum APs per Device (Controller) | 1000 ¹ (large scale installations) 100 ¹ (small scale installations) |
| WLAN Management Features | <ul style="list-style-type: none"> • AP grouping • Multi-tenancy • Visualized topology • NAT pass-through • Setup wizard • AP discovery (layer 2 and layer 3) • Report system |
| User Authentication | |
| Guest Portal | Captive portal |
| Authentication Method | <ul style="list-style-type: none"> • Local • POP3 • RADIUS • LDAP • Voucher |
| Hotspot Features | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • Auto Output Power Control • Auto Channel • Self-healing around failed APs |
| Multiple SSIDs per Radio(AP) | 8 |
| Advanced Wireless Features | <ul style="list-style-type: none"> • Band steering • L2 roaming • Bandwidth optimization • 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 |
| Order Information | |
| Part Number | Description |
| DNC-100 | Nuclias Connect |

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-2230 | DAP-2310 | DAP-2360 | DAP-2610 | DAP-2620 |
| Environment | Indoor | Indoor | Indoor | Indoor | Indoor |
| Product Image |  |  |  |  |  |
| H/W Version | Ax | Bx | Bx | Ax | Ax |
| IEEE Standard | 802.11 b/g/n | 802.11 b/g/n | 802.11 b/g/n | 802.11a/b/g/n/ac | 802.11 a/b/g/n/ac |
| 2.4 GHz Speed | 300 Mbps | 300 Mbps | 300 Mbps | 400 Mbps | 300 Mbps |
| 5 GHz Speed | - | - | - | 867 Mbps | 867 Mbps |
| Number of SSIDs | 8 | 8 | 8 | 16 (8 per radio) | 16 (8 per radio) |
| Ethernet Interface | 1 x Fast Ethernet | 1 x Gigabit Ethernet | 1 x Gigabit Ethernet | 1 x Gigabit Ethernet | 2 x Gigabit Ethernet |
| PoE | 802.3af | 802.3af | 802.3af | 802.3af | 802.3af |
| Max Tx Power | 2.4 GHz: 27 dBm | 2.4 GHz: 26 dBm | 2.4 GHz: 26 dBm | 2.4 GHz: 23 dBm 5 GHz: 23 dBm | 2.4 GHz: 23 dBm 5 GHz: 23 dBm |
| Antenna Type | Internal | External | External | Internal | Internal |
| Antenna Gain | 2.4 GHz: 3 dBi | 2.4 GHz: 2 dBi | 2.4 GHz: 5 dBi | 2.4 GHz: 3 dBi 5 GHz: 3 dBi | 2.4 GHz: 2 dBi 5 GHz: 2 dBi |
| Mounting Type | Ceiling/Wall/Desktop | Wall/Desktop | Wall/Desktop | Ceiling/Wall/Desktop | Wall Plate |
| Security Lock | Yes | No | Yes | Yes | Yes |


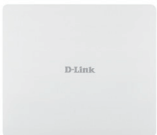
* Please contact your local D-Link office for availability.

Nuclias Connect Device Compatibility*

| Nuclias Connect Supported Wireless Access Points | | | | | |
|--------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Model | DAP-2660 | DAP-2662 | DAP-2680 | DAP-2682 | DAP-2695 |
| Environment | Indoor | Indoor | Indoor | Indoor | Indoor |
| Product Image |  |  |  |  |  |
| H/W Version | Ax | Ax | Ax | Ax | Ax |
| IEEE Standard | 802.11a/b/g/n/ac | 802.11a/b/g/n/ac | 802.11a/b/g/n/ac | 802.11a/b/g/n/ac | 802.11a/b/g/n/ac |
| 2.4 GHz Speed | 300 Mbps | 300 Mbps | 450 Mbps | 600 Mbps | 450 Mbps |
| 5 GHz Speed | 867 Mbps | 867 Mbps | 1300 Mbps | 1732 Mbps | 1300 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 | 1 x Gigabit Ethernet | 1 x Gigabit Ethernet | 2 x Gigabit Ethernet | 2 x Gigabit Ethernet |
| PoE | 802.3af | 802.3af | 802.3at | 802.3at | 802.3at |
| Max Tx Power | 2.4 GHz: 26 dBm 5 GHz: 26 dBm | 2.4 GHz: 26 dBm 5 GHz: 26 dBm | 2.4 GHz: 26.5 dBm 5 GHz: 26.5 dBm | 2.4 GHz: 23 dBm 5 GHz: 23 dBm | 2.4 GHz: 27.5 dBm 5 GHz: 27.5 dBm |
| Antenna Type | Internal | Internal | Internal | Internal | External |
| Antenna Gain | 2.4 GHz: 3 dBi 5 GHz: 4 dBi | 2.4 GHz: 3.8 dBi 5 GHz: 3.8 dBi | 2.4 GHz: 3.6dBi 5 GHz: 4.2 dBi | 2.4 GHz: 2 dBi 5 GHz: 2 dBi | 2.4 GHz: 4 dBi 5 GHz: 6 dBi |
| Mounting Type | Ceiling/Wall/Desktop | Ceiling/Wall/Desktop | Ceiling/Wall/Desktop | Ceiling/Wall/Desktop | Wall/Desktop |
| Security Lock | Yes | Yes | Yes | Yes | Yes |

* Please contact your local D-Link office for availability.

Nuclias Connect Device Compatibility*

| Nuclias Connect Supported Wireless Access Points | | |
|--------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Model | DAP-3662 | DAP-3666 |
| Environment | Outdoor | Outdoor |
| Product Image |  |  |
| H/W Version | Ax | Ax |
| IEEE Standard | 802.11a/b/g/n/ac | 802.11a/b/g/n/ac |
| 2.4 GHz Speed | 300 Mbps | 300 Mbps |
| 5 GHz Speed | 867 Mbps | 867 Mbps |
| Number of SSIDs | 16 (8 per radio) | 16 (8 per radio) |
| Ethernet Interface | 2 x Gigabit Ethernet | 2 x Gigabit Ethernet |
| PoE | 802.3af | 802.3af |
| Max Tx Power | 2.4 GHz: 26 dBm 5 GHz: 26 dBm | 2.4 GHz: 26 dBm 5 GHz: 26 dBm |
| Antenna Type | Internal | Internal |
| Antenna Gain | 2.4 GHz: 6 dBi 5 GHz: 6 dBi | 2.4 GHz: 6 dBi 5 GHz: 6 dBi |
| Mounting Type | Pole | Pole |
| Security Lock | Yes | Yes |

* Please contact your local D-Link office for availability.