



The ultimate guide to remote working

D-Link can help you ensure your home network is ready for the challenges of doing business at home in 3 simple stages.



D-Link can help you ensure your home network is ready for the challenges of doing business at home
in 3 simple stages...



Extend...

...your Wi-Fi to where you need the best connection with wireless range extenders and the latest routers including Wi-Fi 6.

...your wired network with a wide range of easy to use, affordable switches.

...your connectivity with a range of USB hubs so you can add screens, cameras, microphones & fans.

Secure...

...your business data; 4G and 5G routers so you can create a dedicated network for your business data.

Our extensive range of VPN routers, securely connect to your office to protect your data. Added virus and controls, with McAfee Secure Home and Livesafe included free of charge in our range of routers.



Centrally manage...

...all your remote workers and provide business class Wi-Fi at home with Nuclias cloud and Nuclias connect solutions.

It's more affordable than you think!

D-Link®

The ultimate guide to remote working

As more businesses move towards confirming their plans for either returning to the office, hybrid solutions or full time at home, setting up a proper home working solution is essential. You probably require a few upgrades or new products that will create a more workable home office environment.

From the smaller problems, like a lack of USB ports to charge both your phone and plug in your wireless mouse, to the 10 year older router that powers your wireless network, If you are going to work from home either permanently or in a hybrid solution, you should consider resolving these issues.

Here is a great start, with D-Link's handy guide to remote working!

Plan your remote working setup

First things first – lets establish a plan! What is the end goal? More connectivity, faster speeds, data security and better capacity are all possible, but there are a few things to consider before we dive in

- **Your environment**

Mansion, house, flat or garden, where you plan to work will have an impact on what equipment you need

- **How often will you be working at home**

Are you at home every day or just 1 day a week

- **Bandwidth requirements**

Are you hungry for bandwidth? video conference calls or upload/downloading images and videos

- **Wired or Wireless**

Can you cable up devices or is it mostly going to be wireless connectivity

- **Level of security**

If you work with personal data or financial details for instance, you will need to consider a higher level of security

D-Link®

Casual Home/Remote worker

If you work from home infrequently, or your network requirements amount to just checking emails, file downloads/uploads and the occasional video conference meeting, then a basic set up is all you require. Lets run through the requirements for a basic home office set up.

USB hub/docking station

As the streamlining of most modern laptops continues, the added portability often has an negative impact on connectivity, sacrificing Ethernet, HDMI and USB ports. As most offices will have docking stations, this only becomes an issue at home. A USB hub acts like a docking station and enables you to connect all of your devices, charge your phone, and connect multiple monitors.

What is a Hub?

A Hub will add extra ports to your laptop, desktop, games console or other devices with a USB port, usually they will be USB-A or USB-C. Hubs can also draw power via the USB connection and their lightweight portability allows them to fit into your pocket. USB hubs are plug and play meaning they can just be plugged into your device and they are ready to go.

D-Link Hubs come with a range of options on size and features from 4-in-1 to 8-in-1's our range should tick all the required boxes for use in your home office.



DUB-M420

**4-in-1 USB-C Hub with
HDMI and Power Delivery**



Instantly add an HDMI port for a second display, two USB 3.0 ports, while keeping a USB-C port free for your laptop simply by plugging the hub into a USB-C port.

DUB-M810

**8-in-1 USB-C Hub with
HDMI/Ethernet/Card
Reader/Power Delivery**



Add a second display, a dual-slot SD and microSD card reader, a Gigabit Ethernet port, three USB 3.0 ports with one that can Quick Charge, and a USB-C port to your laptop.

DUB-H7

7-Port USB 2.0 Hub



An easy way to add 7 additional USB ports to your PC or Mac, allowing you to connect more devices. With its Fast Charge Mode, each of the USB ports can provide sufficient power to connect and charge iPads and tablets.

The router is the king

When its comes to internet, the router is the king – the gateway to all the rest of your networking solution. So if you are still using the router your ISP provided, you could be limiting your network wireless speeds, security and reliability.

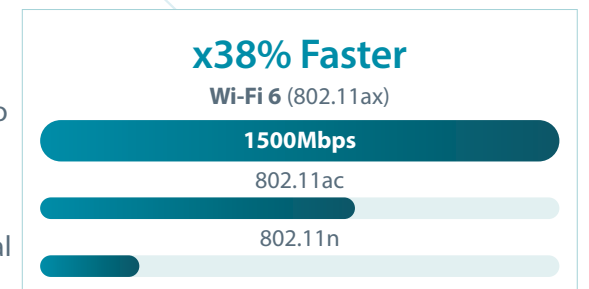
So what makes a good router?

Wireless Speed

W-Fi 6 by D-Link - A new type of wireless that's even faster. Bring home speeds of up to 1.5 Gbps. Experience a jump of up to 38% faster speeds than Wireless AC, for a better way to enjoy snappier browsing, 4K streaming and online gaming*.

Coverage Area

If you have a larger area to cover, a router with more external antenna's will provide more flexibility, because they can be adjusted to focus broadcast in different directions.



Routers feature set essentials

Mu-Mimo (multi user, multi input, multi output)

MU-MIMO allows the router to broadcast to many devices on the network at the same time, as opposed to one at a time, increasing efficiency.

QoS (Quality of Service)

QoS lets you tell your router which devices you would like it to prioritise, so that you can choose which devices have priority such as your work laptop or VoIP handset.

App-Based Management

Apps simplify the task of setting up and making adjustments to your Wi-Fi network, monitoring when devices are connected and helps to easily manage router updates.

DIR-X1560

**Smart AX1500
Wi-Fi 6 Router**



All feature;

Green technology - Save your battery life. Target Wake Time (TWT) automatically helps reduce battery consumption

Security - 128-bit encryption is the most advanced standard available

DIR-X1860

**Smart AX1800
Wi-Fi 6 Router**



DIR-X5460

**Smart AX5400
Wi-Fi 6 Router**



*Maximum wireless signal rate derived from IEEE Standard 802.11ax and 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, may lower actual data throughput rate. Environmental factors may adversely affect wireless signal range.

The ultimate guide to remote working

Mesh - Whole home coverage

Mesh Wi-Fi or Whole Home Wi-Fi systems consist of a main router that connects directly to your modem, and a series of satellite modules, or nodes, placed around your house for full Wi-Fi coverage. They are all part of a single wireless network and share the same SSID and password, unlike traditional Wi-Fi routers.

A Mesh network is perfect for larger/3 storey homes or oddly shaped abodes, position each node throughout your home, to enable better Wi-Fi coverage

Why Mesh?

Full-strength Wi-Fi for your whole home.

Enjoy one seamless network for your entire home. Experience Wi-Fi coverage in every room and get rid of all Wi-Fi blackspots and dropouts.

More Coverage

The COVR-X1860 Series can cover up to 8,500 sq. ft. — enough seamless Wi-Fi coverage to eliminate pesky Wi-Fi dead zones in houses of different sizes and designs

Free Yourself with Smart Roaming

Don't let endless disconnecting and reconnecting to different networks cripple your Wi-Fi experience. Smart Roaming keeps you constantly connected to the strongest signal even as you move from room to room.



COVR-X1862

AX1800 Mesh Wi-Fi 6 System - 2 nodes



COVR-X1863

AX1800 Mesh Wi-Fi 6 System - 3 nodes



DAP-1665



Wi-Fi extenders

If you have a good quality router, but can't reach all the corners of your property, a good idea is a Wi-Fi extender to amplify the signal, i.e. have one upstairs to boost the signal to that spare room that's now an office. A good extender will support multiple operational modes and can operate as an Access Point, bridge, bridge with AP or a repeater, giving you the flexibility needed for your network.

Switching – Wired Networks

If it's possible within your home, a wired network solution can provide better stability and performance than a wireless one, as wired connections are less prone to radio interference and lose fewer packets of data that need to be retransmitted. In reality however, it may not be convenient to run cables to every device, so we recommend to use a wired connection when you can, then a wireless connection when you can't.

What considerations do you need to make for a wired network?

How many ports do you need?

This is where the planning aspect of the network comes in, a normal router will have 4 LAN ports, so an idea of how many extra ports you will need is necessary, just think of all the work or home devices you'll want to plug in, desktop PC, smart TV, VoIP phone, games console and the switch itself. Switches are most common in 5 or 8 ports versions although many have up to 52 ports!

Network Speed

A switch will either be labelled with Fast Ethernet (10/100mbps) or Gigabit (10/100/1000mbps).

Fast Ethernet

Fast Ethernet can handle speeds up to 100 Mbps, which is probably enough for some people, but those with superfast internet services, will lose the benefits.

Gigabit

10x faster than FE, Gigabit Ethernet can handle the fastest home broadband connections and has the bandwidth to handle high local network demands.

PoE support

Power over Ethernet (PoE) enables network switches to transmit both power and data through an Ethernet cable at the same time, so your PoE enabled switch can connect to an Access Point, Camera or VoIP phone, when there is no power outlet available.

GO-SW-5E

5-Port Fast Ethernet Easy Desktop Switch



Set up a fast, reliable, and efficient wired network in your home or office. The GO-SW-5E is an unmanaged 10/100Mbps switch designed to enhance small workgroup performance while providing a high level of flexibility.

DGS-108

8-Port Gigabit Unmanaged Desktop Switch



This desktop Switch offers an economical way for SOHO and small and medium businesses to benefit from the increased bandwidth of Gigabit Ethernet.

DGS-1026MP

26 Port Gigabit Max PoE Switch



Enables users to easily connect and power PoE-capable devices such as wireless access points (APs), IP cameras, and IP phones.

I've bought all my stuff, how can I use the cool features?

As easy and plug and play as we have made the D-Link product range, to get the fullest out of your network, a few features will have to be set up in order to improve your work from home experience. Here are a few of the most essential features that D-Link products come with that will optimise your network speed.



Quality of Service

Quality of Service or QoS is a tool that will instruct your router how to prioritise the bandwidth on your network, so you can improve the performance of critical network traffic.

Make sure that your devices are prioritised, so you can hit your deadlines over someone streaming Netflix!

Watch our full guide on QoS and how to set it up >>
<https://www.youtube.com/watch?v=eghSM3m4WTQ>

VPN

A VPN or Virtual Private Network is a means used to encrypt your data and protect your identity, by adding a layer of privacy. You can use it to access your home office from a remote location, establishing a secure connection, allowing you access to all your secure data, images or important documents, without anyone spying on your activities.

Watch our full guide on VPN's and how to set one up >>
<https://www.youtube.com/watch?v=jbabq9DOC3w>



DDNS

A common example used to explain what DNS (Domain Name System) does, is a comparison to the phonebook. For example a name in a phonebook translates to a telephone number, DNS does the same for IP addresses. Most home users have an IP address that changes frequently, meaning that accessing a security camera, thermostat or using a VPN becomes a problem.

Thankfully, Dynamic DNS can help by assigning a custom domain name to your home IP address that will update automatically, solving the problem.

Watch our full guide on DDNS's and how to set one up >>
<https://www.youtube.com/watch?v=L0ACp059kPo>

Full time at home - need dedicated bandwidth/security

There's a number of reasons that a home worker could live with the more basic set-up, but its not optimal. Working while the kids are at home, competing for bandwidth with another home worker or a large sized house can all have an affect on your network. Having a separate 4G network could be the solution to your work from home needs.

4G

4G is a potential solution for any worker who requires an added layer of security, or just a separate network. If you work with peoples data, its probably safer to use a separate network rather than share with your kids on TikTok. Whether you use the 4G network yourself or set it up to keep the children separate is up to you. Our 4G products include built-in dual-active firewalls (SPI and NAT) and the latest WPA/WPA2 wireless encryption helps keep your wireless network secure and your traffic safe.

4G also can have advantages over fixed line, particularly in rural areas where line speeds are slow, another advantage is its an instant set up – plug in a sim and go.

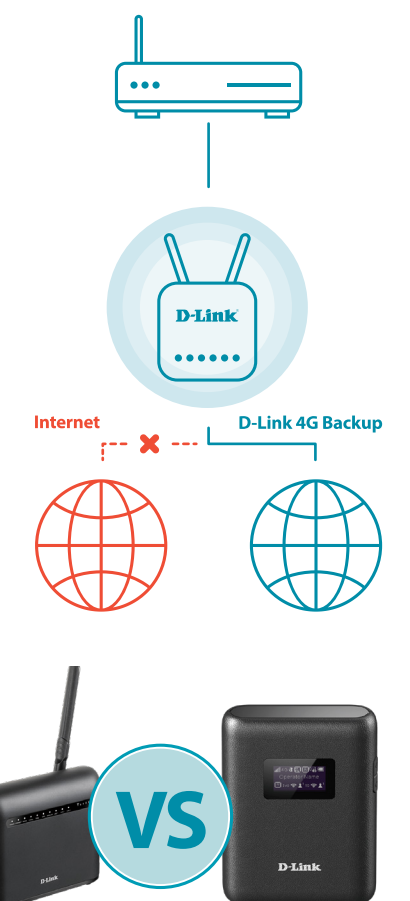
4G failover

D-Link 4G routers are designed with a constant internet connection in mind. You can create failover connectivity if either your fixed line or mobile broadband fails.

The router will instantly switch to the backup mobile internet when you need it most, allowing you to stay connected and enjoy the internet without interruptions so you can maintain your productivity.

Router or hotspot?

D-Link 4G routers are designed to remain mostly stationary, enabling you to plug in many devices including wired connections whereas, a 4G Mobile Hotspot is smaller and lighter, designed to be easily transported and to provide internet access on the go.



DWR-953v2

Wireless AC1200 4G LTE Multi-WAN Router

Allows you to seamlessly switch to a 4G LTE mobile internet backup network when your broadband internet goes down, with download speeds of up to 150 Mbps*, so you can keep using the internet without interruptions.



DWR-933

4G/LTE Cat 6 Wi-Fi Hotspot

Share a high-speed portable mobile Wi-Fi hotspot with devices you choose, like laptops, tablets, phones, and more. Its reliable, long-lasting battery means your private 4G hotspot lasts up to 14 hours.



The ultimate guide to remote working

* Data rates are theoretical. Data transfer rate depends on network capacity, signal strength, and environmental factors.

The power of 5G

Powerful 5G networks are continuing to roll out across the UK, in May 2021, we are approaching availability in nearly 400 towns and cities. They have the potential to enable peak data rates that are up to 20 times faster than 4G, provide 1 GB/s simultaneously to workers on the same office floor, and deliver simultaneous connections for 1 million devices per square kilometre. Put simply, it's like being able to download an HD movie in as little as 10 seconds.

5G devices, could be a gamechanger for remote workers, a hotspot device will allow you to work in any location of your home, garden or even the local park, just watch out for screen reflections! The extra speed will make video calls and working with the cloud easy and provide super fast access large file downloads.

DWR-2101

**5G Wi-Fi 6
Mobile Hotspot**



High-speed
5G & Wi-Fi 6



For home, office
or on-the-road



International
network
compatibility



2.4 inch colour
LCD touchscreen



Stand
included



5620 mAh all
day battery



No budget for a separate network? Use a guest wi-fi instead

Separating your guest network from your home network is an added security feature that takes on more importance when you work from home.

Letting your friends and family use your Wi-Fi can cause a serious issue if one of their devices contains a virus and it spreads to the same network you work on.

Business Grade Networking at Home

Previously business grade networks have only been available to the most demanding companies and their network infrastructure and professional installation requirements. Times change, and with the power of cloud scalability enables you, the home user, to take advantage of business grade performance at home.

With more people working at home than ever before, the need for these solutions is now, and will continue to grow. We all carry mission critical details on our laptops, for example if you work in HR you'll have a database of personnel details, in Marketing you'll have databases of external clients and Finance will have financial records, but you can't allow these to fall into the wrong hands. Business grade solutions will provide extra reliability and enhanced security, so you can be safe in the knowledge that your business data is safe while you work at home.

Access Points - maximise Wi-Fi performance!

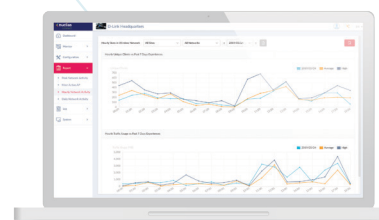
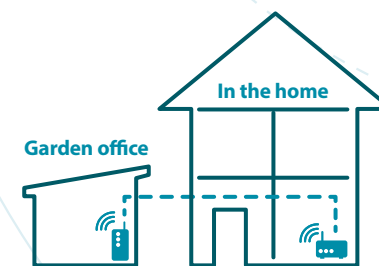
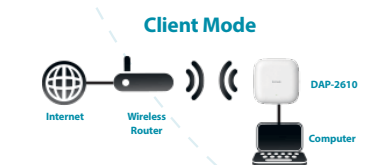
Extend the wireless across your house and or garden with our extensive range of business grade access points, manage these with our simple Nuclias connect software, either on your laptop or on the go on your phone!

Point to Point

Access points set to point to point mode, will allow you to work wherever you choose, by building a 'wireless bridge' between AP's you can enable wireless connectivity across your entire premises, whether you are working in the attic or the end of the garden.

Manage your AP's with free software/app

Manage your Access points with our free Nuclias connect software enabling you to broadcast multiple SSID's and keep an eye on your home network performance. It also enables you to fully customise your network and fulfils privacy and security requirements, with user data never leaving your possession.

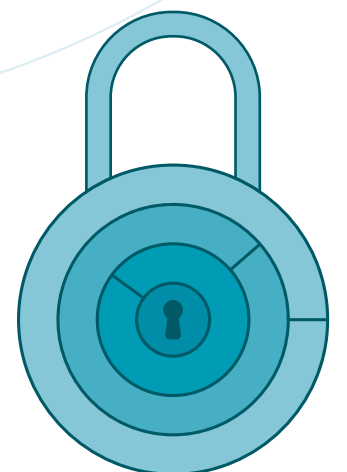


Enterprise grade Features

All Nuclias AP's support Personal and Enterprise versions of WPA3 Wi-Fi encryption, the latest industry-standard 128-bit encryption is the most advanced security standard available and begins a new era of wireless encryption, ensuring greater privacy throughout users' devices and networks.

Advanced features;

- Selectable advanced auto channel selection
- Guest network client isolation
- Social media logins
- Access control listing
- Wi-Fi scheduling
- Bandwidth management





D-Link (Europe) Ltd. First Floor
Artemis Building, Odyssey Business Park
West End Road, South Ruislip
HA4 6QE United Kingdom
0208 955 9000