"D-Link’s network solution gave us a wireless network that was seven times faster. That gives me a competitive advantage, satisfied tenants and peace of mind."

Jesper Kjellerås, founder of Impact Hub Stockholm

Needs

Impact Hub, that has been running a co-working facility for many years, knows that it is important for entrepreneurs and business people to have a stable Internet connection and fast wi-fi. Users expect constant access to all of the tools they need to do their jobs, whether they are at their desk, in the common areas or in a conference room.

In the past, Impact Hub had a number of different solutions for their wireless network, but none of these worked satisfactorily. The networks were too slow, had insufficient capacity and users have been cut off.

In the property where Impact Hub is located there are several different sources of interference, including a number of nearby wireless networks. The office also has a number of meeting rooms and telephone rooms with glass walls, which are very difficult for the wireless signal to penetrate.

“Our requirement was that it must be easy to connect, that everything must work 110 per cent. We don’t have an in-house IT department to turn to.”

Needs

D-Link’s first step was to identify which channels the other companies in the area were using. This analysis revealed that Impact Hub was using the same channel on the 2.4 GHz band as 12 other wireless networks in the building. This results in interference and poor performance. Furthermore, there were not enough access points in relation to the floor space in the premises and the number of users.

In order to eliminate all of the interference and achieve a stable, fast wireless network, D-Link chose to deliver a wireless network based on the new 802.11ac standard, which can achieve transmission in both the 2.4 GHz and the 5GHz band. The system covered the office space of 478 square metres with five wireless access points. In addition to this, two switches and a central management system were also supplied.

The five access points installed provide a combined wireless speed of up to 1,750 Mbps. This enables bandwidth-intensive services to work quickly and smoothly for all clients. 802.11ac is also reverse compatible with old standards.

The wireless Gigabit Switch Controller, DWS-3160, forms the basis of the network. The switch has a central management system, which enables administrators to have total control over the whole network. They can manage the wireless access points remotely and constantly see the status of the network and how many clients are connected.

To provide the facility for power transmission via the network without having to lay electrical cables to each access point, the network was also supplemented with a Power over Ethernet (PoE) access switch.

The four most important factors for a fast, reliable wireless network with the best range are:

- Choosing the latest 11ac standard.
- The network must be able to handle the 2.4 GHz and 5 GHz bands.
- Correct location of and sufficient number of access points.
- Correct network equipment, such as switches, firewalls and routers.
Benefit For Impact Hub

Jesper Kjellerås, the founder of Impact Hub Stockholm, says that the new solution has been very well received and that the difference compared with before is huge. Wireless performance is much faster and people can now move around the premises with full coverage at all times. The 11ac network is stable, with no interference and no more occasional crashes.

Another benefit with the new wireless network is that it can handle all wireless clients even when there are a lot of people in the premises at the same time. On some days the company holds breakfast and evening seminars, when more than 150 people are in the premises at the same time – Impact Hub can now offer every single person a guest login via the wireless network.

According to Jesper Kjellerås, administration using a central management tool is also a major benefit. Instead of logging in on a number of different devices to make adjustments, this can now be done centrally and remotely from one single device. The administrator can also see the status of the network at all times and how many clients are connected.

After installation, the wireless speed increased from 14 Mbps to around 95 Mbps. Another benefit was the roaming function, which enables people to move around the entire premises and hold a Skype conversation without it being cut off between different access points. There was also a significant improvement in network security.

Benefits of the new wireless network solution:
• 6.5 times faster wireless network
• Full coverage throughout the premises with no interference
• Possibility to handle more users and clients
• Possibility to offer guest login
• Central management system with remote access
• Increased security
• No need for electrical cables to access points

Customer Profile

Impact Hub consists of a network of more than 10,000 entrepreneurs who work every day to find solutions to problems, both big and small. Impact Hub has a presence in 70 cities all over the world, where the company creates the conditions for realising and developing entrepreneurs. At Impact Hub Stockholm there are 60 workstations, office equipment and facilities for meaningful meetings, the sharing of ideas and inspiration.