



Department for
Business, Energy
& Industrial Strategy

DNSBOX supports BEIS' move to minimum on-premise infrastructure

Challenge

New IT strategy demanded minimum on-premise infrastructure

Department needed to eliminate the management and OPEX costs of physical IT infrastructure

Solution

Simple, low-cost DHCP solution was needed for the project

Redundant pair of **DNSBOX200** DHCP servers for 5000+ users

Benefit

Reliable, dedicated and high availability DHCP

Easy to deploy and manage

The Department for Business, Energy and Industrial Strategy (BEIS) was formed in 2016, as a result of a merger between the government-owned departments of Energy and Climate Change and Business, Innovation and Skills (BIS).

BEIS has sites all over the UK. A number of agencies fall under the BEIS umbrella, each with its own IT strategy.

The department needs to give its employees the same familiar user experience in the office as they would get working from home, an internet café or a hotel.

Merger allows a fresh approach to IT infrastructure

BEIS's HQs are located in London and hosts around 5k users. Network Product Manager Sarath Palety describes how a new IT strategy shaped the department:

"When we were still at BIS, the infrastructure was very different – we had a number of physical servers, data centres (DCs) and several third-parties providing data centre services. Users needed wired connectivity to access the internet. Wifi was a thing on the side, like for guests, but it wasn't the primary mode of connectivity. All the infrastructure was hosted on private DCs. Managing this was cumbersome. We had to worry about keeping checks on the physical infrastructure, power, cabling and so on."

"The Department's new strategy was to move away from this and towards cloud-based automation. When it was being piloted in 2016, this is what the project encompassed – lowering OPEX by deploying and integrating IT services more seamlessly, minimising the hassle of having to deploy services for each department separately."

Sarath was responsible for developing the wireless network, managing internet connections and ensuring network security.

Unlike the previous infrastructure, key to the department's new strategy was to have minimum on-premise infrastructure: everything would be cloud-based.

A cloud-first strategy needs solid on-premise DHCP

"By moving most of the IT infrastructure to the cloud, the previous headaches of managing a physical network infrastructure were out of the way," says Sarath.

However, DHCP had to be left on-premise because it's impossible to do IP Address allocation on the cloud. When a device connects to the network, it needs to get an IP address – without which it can't connect to the internet in the first place.

"So, like firewalls and access points, DHCP is one of the few things that need to be kept on-premise."

“*Managing the old IT infrastructure was cumbersome. We had to worry about keeping checks on the physical infrastructure, power, cabling and so on. The Department's new strategy was to move away from this and towards cloud-based automation.*”

Sarath Palety, Network Project Manager, BEIS



DHCP is a small yet very vital service for a network. So I wanted a dedicated, easy to manage solution that worked right out the box - essentially just a plug-and-play appliance that simply dished out IP addresses.



Sarath Palety, Network Project Manager, BEIS

DNSBOX's modular design enables affordable, robust DHCP

Sarath searched online for a low-cost, dedicated DHCP solution to trial for piloting BEIS' new network strategy.

"We wanted something simple, and on-premise. I had looked into other products online, but most were offering an overarching solution for the entire network, with DC presence. They were also a lot more expensive and weren't suited for this really basic yet vital requirement," he said.

"If I went through the MS Windows route, for instance, I'd get the software side of things as well as DHCP - but that involved getting a server from another supplier and going through the whole process of installing the DHCP service and so on. It's just too many people looking after this very small service."

These were exactly the kind of management headaches the department wanted to move away from.

So Sarath chose a **DNSBOX** solution: **DNSBOX200**'s modular approach meant that he could opt for just a dedicated DHCP server to perfectly fit the limited requirement.

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High availability DHCP that 'just works'

"When the network project was still in pilot, we decided to trial **DNSBOX** to see if it matched our requirement, and honestly, it has performed really well. I haven't had any issues, haven't had to think too much about it, which is always a good sign!"

Now that the department is fully set up, Sarath has deployed a redundant pair of **DNSBOX200** DHCP servers to provide IP leases for the ~5k devices at the department's main London site.



DNSBOX is easy to deploy and manage, and really affordable.



Sarath Palety, Network Project Manager, BEIS