



South Bound Brook Public School
One School, One Community

DNSBOX solves on-site DNS and DHCP headache

Challenge

- Transitioning from Microsoft to Google network, eliminating the need for Windows servers
- DHCP is a core network service that should remain on-site
- Did not want the admin burden of retaining an on-site Windows Server just for DNS and DHCP

Solution

- **DNSBOX200** appliance for DNS and DHCP
- Reliable, on-site DHCP from dedicated server

Benefit

- Thoroughly tested updates reduce security risks and ensure network stability
- Easy to deploy and manage

About South Bound Brook Public School District

South Bound Brook Public School District is a small K-8 district of 450 students, running 625 devices. It provides IT services for its students, staff, and community, and consistent internet access is essential for teaching.

Chief Technology Officer Lenny Libitz is the only IT person within the district, with a role that covers system and network administration, frontline tech support, and also all aspects of physical and site security.

When Lenny first moved to the district, he worked with the school board and superintendent to make the IT function more efficient and cost-effective so the district could save money over time. They decided to move most of their network infrastructure to the cloud, which raised a question about their DNS and DHCP service.

Migration to the cloud – no more local authentication, no need for Windows server

“Our district went from Microsoft – with Windows laptops and Windows OS – over to Google Chromebooks”, explains Lenny. “Turning this district into a Google District with Google Workspace has worked very well. We still maintain a fleet of Windows devices, but it has allowed us to move away from Windows servers.

“The Windows domain controllers that were running Active Directory were no longer needed because we’re using a new mechanism, Google Credential Provider, to authenticate on our Windows devices. So it comes to a point where we’re no longer authenticating internally, and we could remove the Windows servers from the environment – but if we did that, we’d need to find a solution for DNS and DHCP.

“So, do we really need to maintain that Windows Server just for those two services?”

Deciding on a dedicated server for DNS and DHCP

Lenny had started considering his options for an alternative DNS and DHCP server. “I was looking to run my own server internally off a Linux distribution to provide the services, and then try to use whatever expertise I had or could learn to harden it. But the issue I ran into is our backbone.”

Despite maintaining local virtual servers for some services, like his print server, Lenny did not want to host his DNS and DHCP service on a virtual machine. If the server went down, even from one failed maintenance update, the district would lose the ability to access the web and it would take hours or days for Lenny to get it back online.

“As I was working out my options, I received an e-mail from ApplianSys. So I started to look into it: do I want to run my own server instead of a Microsoft server, or do I want to find an appliance that will work for us?”



We could remove Windows servers from the environment but we would need to find a solution for DNS and DHCP.



Lenny Libitz

Chief Technology Officer

Two prerequisites: reliable and easy-to-use

Lenny had two core priorities: "Our biggest task in education is to provide services and make sure that they are reliable. DNS and DHCP are two services that you desperately need to maintain connectivity to the Internet, and my main concern was limiting the risk of malicious events and hardware failures.

"Being easy to use was my other prerequisite – making sure that if I am not here and I move on, can someone else sit in my chair and figure it out with very minimal training?"

"If you don't understand what you're doing with DHCP or DNS you can cripple your network. If you delete the scope for DHCP, you're done, and if you do the same with DNS, your internal devices will not resolve to the domain name that you're looking to resolve to internally."

Dedicated appliance = easier updates, fewer risks

As a server dedicated to running only DNS and DHCP services, and with all the advantages of a high quality productized appliance, **DNSBOX** is a natural choice for Lenny.

"The operating system that's running on the appliance is a hardened version of Linux. It's designed to do a task and it has to be reliable and efficient at that task.

"Whenever I do get update notifications for **DNSBOX**, I'm pretty confident that those updates will apply flawlessly because they are vetted and tested on a very specific set of hardware. Other server updates have to work on a very broad range of hardware types, so there is a much higher risk of failure.

"It's one less thing to worry about on your network. It's one less thing to manage. There's very little overhead in terms of training, it takes very little time to run updates – about a minute later, the box is back up doing its job. I don't have to worry about it crashing."

Web-based interface that makes deployment and management easy

Lenny chose a **DNSBOX200** solution, configured for DNS and DHCP. After initial setup, the **DNSBOX** was up and running within two hours: Lenny configured the new appliance and migrated all the existing DHCP scopes with guidance from the ApplianSys support team. "It was super easy to bring over our existing ranges, our devices, all of our printers – everything just worked. We had no issues with devices losing their IP addresses."

The web-based interface of **DNSBOX** also brought specific benefits to Lenny's workday.

"You can pretty much use any device that has a modern web browser to connect to the appliance – I can connect to the **DNSBOX** internally from my phone. If I have to make a change, or add a brand new printer to a static reservation and give it a particular IP address, it's maybe 4 clicks and I'm done.

"I have a little reminder to just check it and go through some of the logs. I wish I could say it's exciting to do, but it doesn't have to be – it just works."

As a result, Lenny is confident in recommending **DNSBOX** to others. "Especially in smaller organizations like ours, the person managing the network may not have the expertise, they may be multi-role, they may be a teacher in the classroom half day and then it is their second job in the school. This is something that I would highly recommend generally, but even more so for someone who doesn't necessarily have the experience to manage another solution".

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