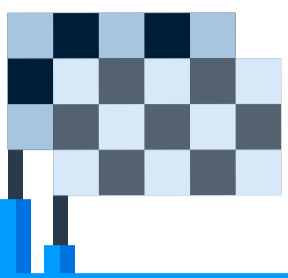


# Balancing Security and Privacy with DoT and DoH



DNS is fundamental to the Internet.  
But it wasn't built with security and privacy in mind.

Unlike other Internet protocols and services, DNS has been vulnerable to "last mile" security issues

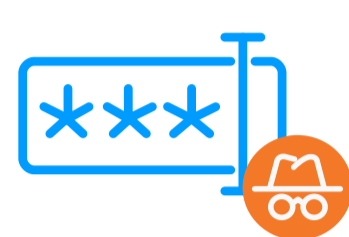
Endpoint communications are not encrypted, making them open to:



Snooping



Interception



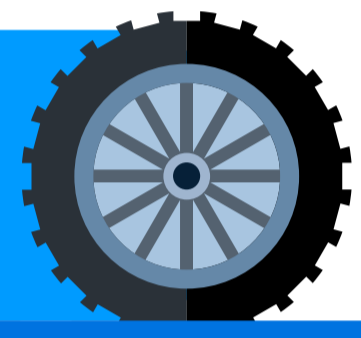
Data theft

Third parties and bad actors can learn a lot, simply based on what sites people access.



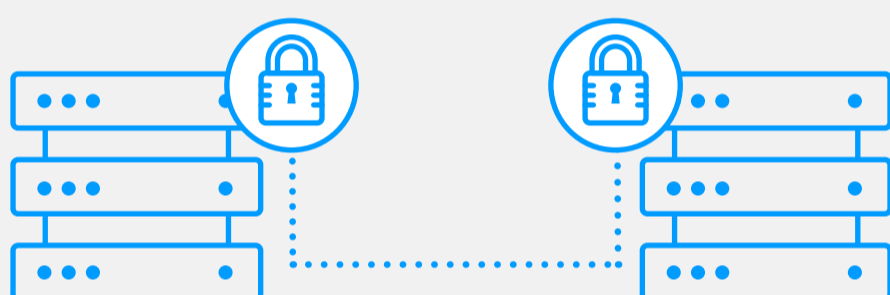
So it's more important than ever to **balance user privacy with security**

## Two new developments are improving DNS privacy: DoT and DoH



Both encrypt communication between the endpoint and recursive resolver.

**DNS over TLS (Transport Layer Security) or "DoT"**  
Works at the OS level.



**DNS over HTTPS or "DoH"**  
Is limited to web browsers today—but will soon find its way into other applications.



## Both are designed for privacy

But there's a catch: they allow people to sidestep enterprise DNS controls.

That could lead to:

Exposure to data exfiltration and malware proliferation

Loss of visibility

47%

of organizations in a recent survey experienced DNS phishing

7 in 10

employees struggle with cyber awareness

64%

of organizations in the same survey say DNS security is critical for business



Circumventing the internal DNS infrastructure is a bad idea.

The right best practices can help you solve the "last mile problem." Without compromising security.

## The solution?

➤➤ Block access to unauthorized DoT/DoH servers

➤➤ Use internal DNS resolvers to retain control and security

It's time to get proactive about DNS security

Read the [Solution Note](#)