**12 common network protocols and their functions explained**

**Networking makes the internet work, but neither can succeed without protocols. Common network protocols and their functions are key for communication and connection across the internet.**

****

By

* [**Michaela Goss,**](https://www.techtarget.com/contributor/Michaela-Goss)Senior Site Editor

Published: **16 May 2023**

Without network protocols, the modern internet would cease to exist.

Network protocols enable the exchange of information across the internet and work behind the scenes so effectively that many users don't think twice about them or how the internet works. But it's critical for networking professionals to know and understand protocols as the foundation of networking.

**This glossary explores 12 common network protocols network engineers should be familiar with** and provides information about their main functions and importance.

**1. Address Resolution Protocol (ARP)**

**2. Border Gateway Protocol (BGP)**

**3. Domain name system (DNS)**

**4. Dynamic Host Configuration Protocol (DHCP)**

DHCP

**5. File Transfer Protocol (FTP)**

**6. Hypertext Transfer Protocol (HTTP)**

**7. Internet Protocol (IP)**

**8. Open Shortest Path First (OSPF)**

**9. Simple Mail Transfer Protocol (SMTP)**

**10. Telnet**

**11. Transmission Control Protocol (TCP)**

**12. User Datagram Protocol (UDP)**

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Check out these video definitions from TechTarget's YouTube channel, Eye on Tech, to get more insight into common network protocols.

* [What is Address Resolution Protocol (ARP)?](https://www.youtube.com/watch?v=tCjgoZNamWA)
* [What is BGP (Border Gateway Protocol)?](https://www.youtube.com/watch?v=A1KXPpqlNZ4)
* [What is DNS and How Does It Work?](https://www.youtube.com/watch?v=9d0iu2Q6iMU)
* [What is DHCP (Dynamic Host Configuration Protocol)?](https://www.youtube.com/watch?v=uYYRcbN9qIM)
* [What is SMTP (Simple Mail Transfer Protocol)?](https://www.youtube.com/watch?v=AoqvWgazf50)
* [What is TCP/IP and How Does It Work?](https://www.youtube.com/watch?v=614QGgw_FA4)
* [What is UDP (User Datagram Protocol)?](https://www.youtube.com/watch?v=zFS0FaSqvcQ&t)