Port

Define ;

A port is a virtual point where network connections start and end. Ports are software-based and managed by a computer's operating system. Each port is associated with a specific process or service. Ports allow computers to easily differentiate between different kinds of traffic: emails go to a different port than webpages, for instance, even though both reach a computer over the same Internet connection.

Port Number ;

Ports are standardized across all network-connected devices, with each port assigned a number. Most ports are reserved for certain protocols — for example, all Hypertext Transfer Protocol (HTTP) messages go to port 80. While [**IP addresses**](https://www.cloudflare.com/learning/dns/glossary/what-is-my-ip-address/) enable messages to go to and from specific devices, port numbers allow targeting of specific services or applications within those devices

Different Port Numbers ;

There are 65,535 possible port numbers, although not all are in common use. Some of the most commonly used ports, along with their associated networking protocol, are:

* **Ports 20 and 21:** File Transfer Protocol (FTP). FTP is for transferring files between a client and a server.
* **Port 22:** Secure Shell (SSH). SSH is one of many tunneling protocols that create secure network connections.
* **Port 25**: Historically, Simple Mail Transfer Protocol (SMTP). SMTP is used for email.
* **Port 53:** Domain Name System (DNS). DNS is an essential process for the modern Internet; it matches human-readable domain names to machine-readable IP addresses, enabling users to load websites and applications without memorizing a long list of IP addresses.
* **Port 80:** Hypertext Transfer Protocol (HTTP). HTTP is the protocol that makes the World Wide Web possible.
* **Port 123:** Network Time Protocol (NTP). NTP allows computer clocks to sync with each other, a process that is essential for encryption.
* **Port 179:** Border Gateway Protocol (BGP). BGP is essential for establishing efficient routes between the large networks that make up the Internet (these large networks are called autonomous systems). Autonomous systems use BGP to broadcast which IP addresses they control.
* **Port 443:** HTTP Secure (HTTPS). HTTPS is the secure and encrypted version of HTTP. All HTTPS web traffic goes to port 443. Network services that use HTTPS for encryption, such as DNS over HTTPS, also connect at this port.
* **Port 500:** Internet Security Association and Key Management Protocol (ISAKMP), which is part of the process of setting up secure IPsec connections.
* **Port 587:** Modern, secure SMTP that uses encryption.
* **Port 3389:** Remote Desktop Protocol (RDP). RDP enables users to remotely connect to their desktop computers from another device.

The Internet Assigned Numbers Authority (IANA) maintains the full list of port numbers and protocols assigned to them.

**Thank You**