

## Task 1: Scan Your Local Network for Open Ports

1. Note down IP Address and open ports found.

1. nmap -sS 192.168.68.111/24

Starting Nmap 7.95 ( <https://nmap.org> ) at 2025-09-24 01:05 EDT

Nmap scan report for 192.168.68.1

Host is up (0.0024s latency).

Not shown: 996 closed tcp ports (reset)

PORT STATE SERVICE

53/tcp open domain

80/tcp open http

443/tcp open https

1900/tcp open upnp

2. Nmap scan report for 192.168.68.104

Host is up (0.0012s latency).

Not shown: 996 filtered tcp ports (no-response)

PORT STATE SERVICE

135/tcp open msrpc

445/tcp open microsoft-ds

5357/tcp open wsddapi

7070/tcp open realserver

3. Nmap scan report for 192.168.68.105

Host is up (0.043s latency).

Not shown: 998 filtered tcp ports (no-response)

PORT STATE SERVICE

2869/tcp open iclslap

5357/tcp open wsddapi

4. nmap scan report for 192.168.68.106

Host is up (0.0098s latency).

Not shown: 998 filtered tcp ports (no-response)

PORT STATE SERVICE

3389/tcp open ms-wbt-server

5357/tcp open wsdapi

5. Nmap scan report for 192.168.68.111

Host is up (0.0039s latency).

Not shown: 995 filtered tcp ports (no-response)

PORT STATE SERVICE

135/tcp open msrpc

139/tcp open netbios-ssn

445/tcp open microsoft-ds

5357/tcp open wsdapi

7070/tcp open realserver

6. Nmap scan report for 192.168.68.119

Host is up (0.0000080s latency).

Not shown: 999 closed tcp ports (reset)

PORT STATE SERVICE

80/tcp open http

2. Research common services running on those ports.

### Web Services

- **80/tcp (http):** This is the standard port for the **Hypertext Transfer Protocol (HTTP)**. This protocol is used to transmit data over the web. When you visit a website that doesn't use encryption, it's using this port. A web server or a device with a web-based management interface, such as a router, commonly uses it.
- **443/tcp (https):** This port is used for **HTTP Secure (HTTPS)**, which is the encrypted version of HTTP. It's the standard for secure communication over the internet, like online banking or e-commerce sites. This port is often open on routers or other network devices with a secure web interface

### Windows Services

- **135/tcp (msrpc):** This port is for **Microsoft Remote Procedure Call (MSRPC)**. It's a protocol that allows a program on one computer to execute code on a different computer. It's used by many Windows services for inter-process communication.
- **139/tcp (netbios-ssn):** This port is for **NetBIOS Session Service**. NetBIOS is an older networking protocol that allows applications on different computers to communicate over a local area network (LAN). It's often used for file and printer sharing.

- **445/tcp (microsoft-ds):** This port is for **Microsoft-Directory Services**, which is tied to the **Server Message Block (SMB)** protocol. SMB is the primary protocol for sharing files, printers, and other resources on Windows networks.
- **2869/tcp (icslap):** This port is related to **Internet Connection Sharing Local Address Pool**. It's often used by Universal Plug and Play (UPnP) to allow devices to discover and interact with each other on the network.
- **3389/tcp (ms-wbt-server):** This port is for **Microsoft Remote Desktop Protocol (RDP)**, a proprietary protocol that lets you connect to another computer and use its graphical interface. It's a common feature for system administration and remote support.
- **5357/tcp (wsdapi):** This is for the **Web Services for Devices API**. It's a Microsoft protocol that allows devices like printers, scanners, and file shares to be discovered and managed over a network.

### Other Services

- **53/tcp (domain):** This is the port for the **Domain Name System (DNS)**. DNS acts like the internet's phonebook, translating human-friendly domain names (like google.com) into the IP addresses that computers use to find each other.
- **1900/tcp (upnp):** This port is for **Universal Plug and Play (UPnP)**. UPnP allows devices to automatically discover each other on a network and establish functional network services. It's commonly found on routers, media servers, and smart home devices.
- **7070/tcp (realserver):** This port is associated with various services, including **RealServer**, an application for streaming audio and video.