

Configuration Manual

MSc Research Project
MSc in Cybersecurity

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MSc Project Submission Sheet



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Programme: MSc in Cybersecurity **Year:** 2024-25

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Lecturer: Kamil Mahajan

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Project Title: Configuration Manual

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Configuration Manual

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1 System Requirements

Laptop requirements

- Hardware and OS details:
- Operating System: Windows
- RAM : 32 GB
- Disk: 954 GB free space

Server requirements:

- Host OS: Windows

2 Tools and Configuration

1. Cisco VPN:

- As Nessus is hosted on an internal server it can be accessed only via Cisco vpn
- Cisco secure client's AnyConnect VPN is use with version 5.1.3

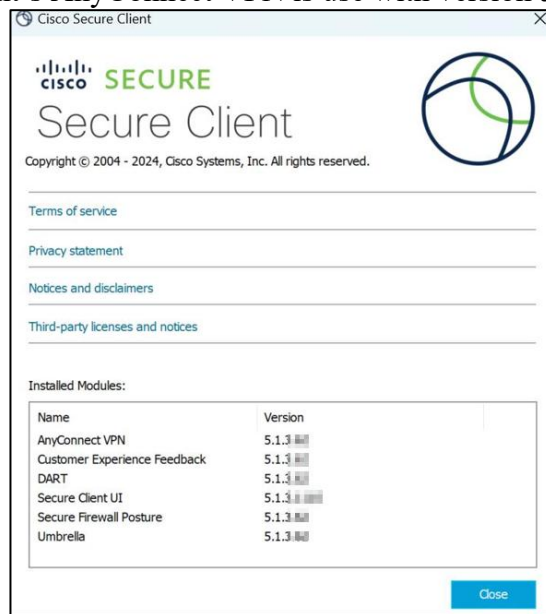


Fig 1: Cisco Secure Client

- To connect to AnyConnect, click on the cisco client and enter the credentials and authorize it via authentication app and then it will be connected

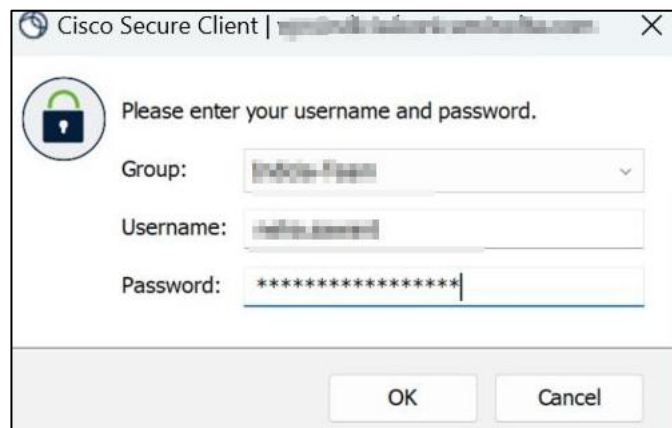


Fig 2: Cisco Secure Client AnyConnect authentication

2. Nessus installation and configuration:

- Install Nessus from [Tenable Nessus site](https://tenable.com/en-us/Products/Nessus).
- Ensure to select appropriate package as per operating system and processor.
- Select the package between Tenable Nessus Manager, Tenable Nessus Professional, and Tenable Nessus Expert.
- After once selecting, you will receive a activation code determines which Tenable Nessus product is installed (Tenable.com, 2025a).
- After downloading Nessus, it can be installed on different operating systems.
- Navigate to the download folder where Tenable Nessus is downloaded and complete the installation
- An InstallShield wizard for tenable Nessus screen appears select “Next” to continue and then accept “License Agreement” where the terms of software license will be mentioned (Tenable.com, 2025b).
- Once accepting this, a screen to change the installation folder for Nessus will pop up. Once that is done, select “install” button.
- After the installation Welcome to Nessus page loads in the default browser. It can even be accessed by going to “https://<remote IP address>:8834”
- Once installed correctly, go to the URL and visit the Nessus expert domain and login using credentials
- There create a folder and in that a scan can be scheduled or a new scan be. Click on New Scan.

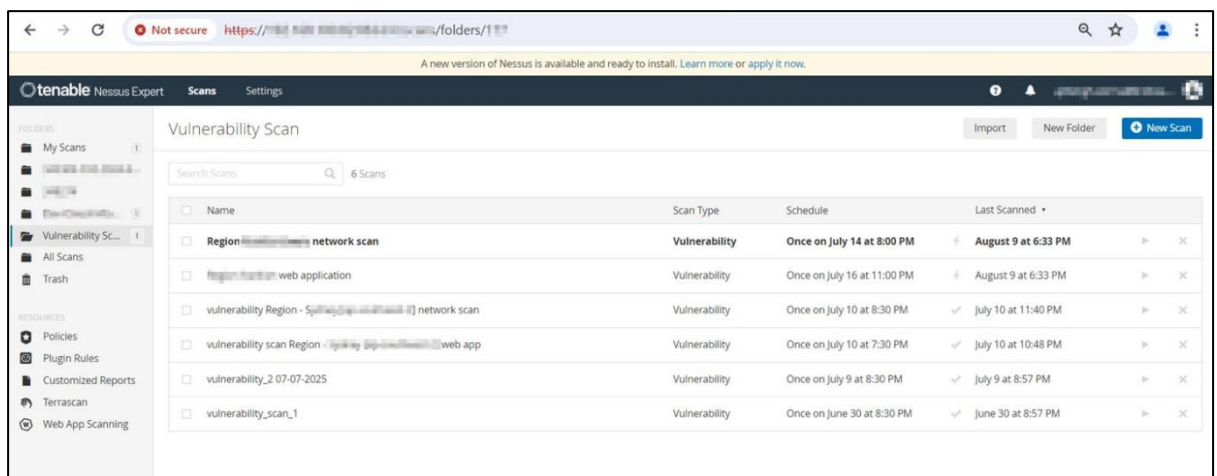


Fig 3 :Nessus Expert Platform

- Select the appropriate scan templates. Select the web application tests and basic network scan as it will help to identify all network and web-based vulnerabilities.

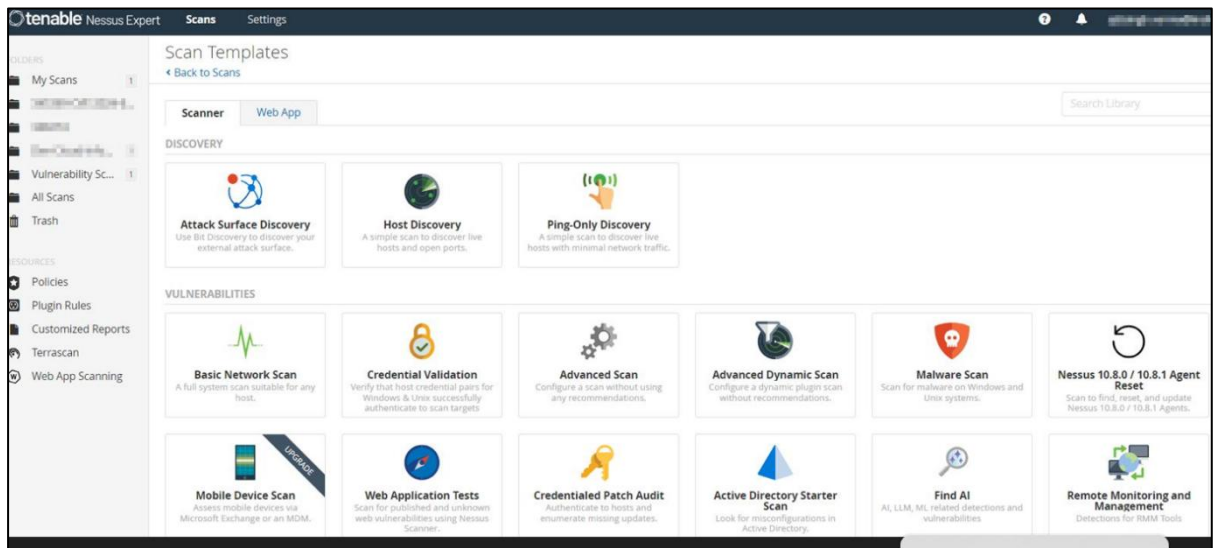


Fig 4 :Nessus Expert Scan Templates

- In that fill the basic details such as the Target Ip address or domain and name for the scan .Here a scan be scheduled as well.

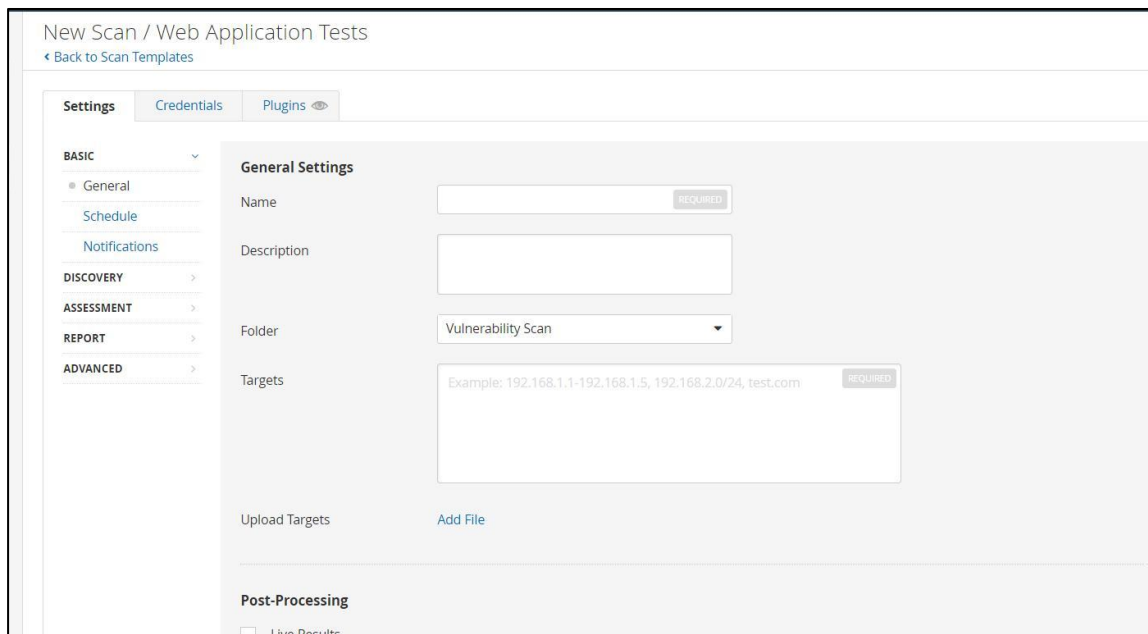


Fig 5: Nessus Scan settings

- Once the scan is complete a complete report can be generated according to the requirement.

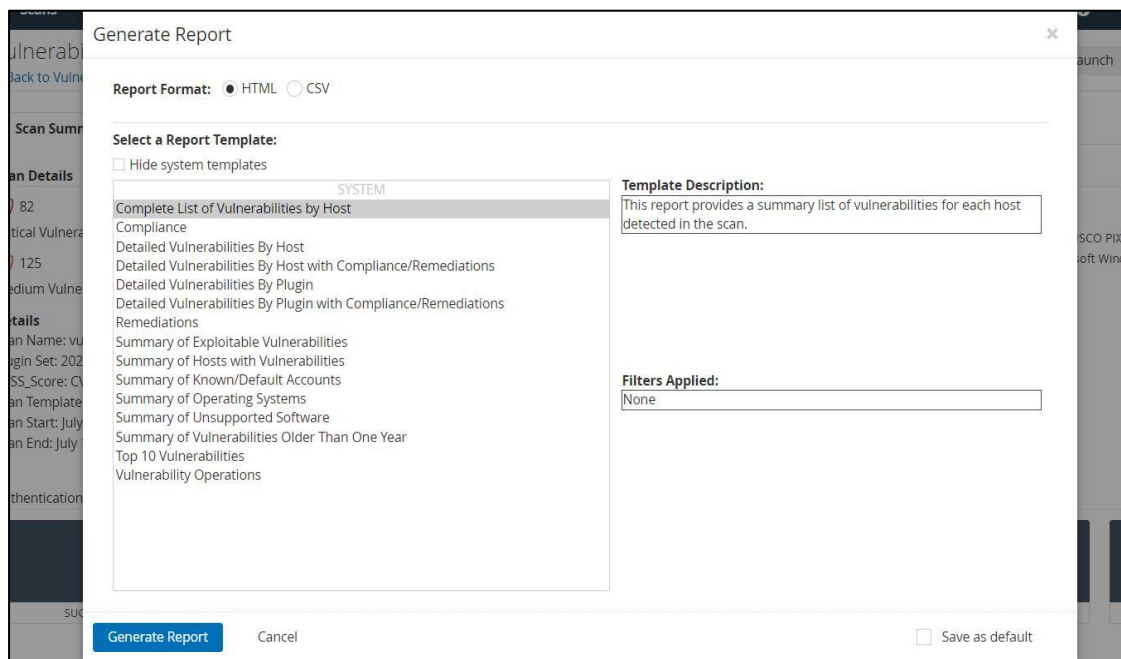


Fig 6: Nessus Report generation

3. Shodan:

- Sign up at <https://account.shodan.io/>
- Generate the API key to access the shodan via shell(Shodan.io, 2025).
- To access and get information , login to Shodan account.
- Then search the Ip of the host on shodan and get information about the host.

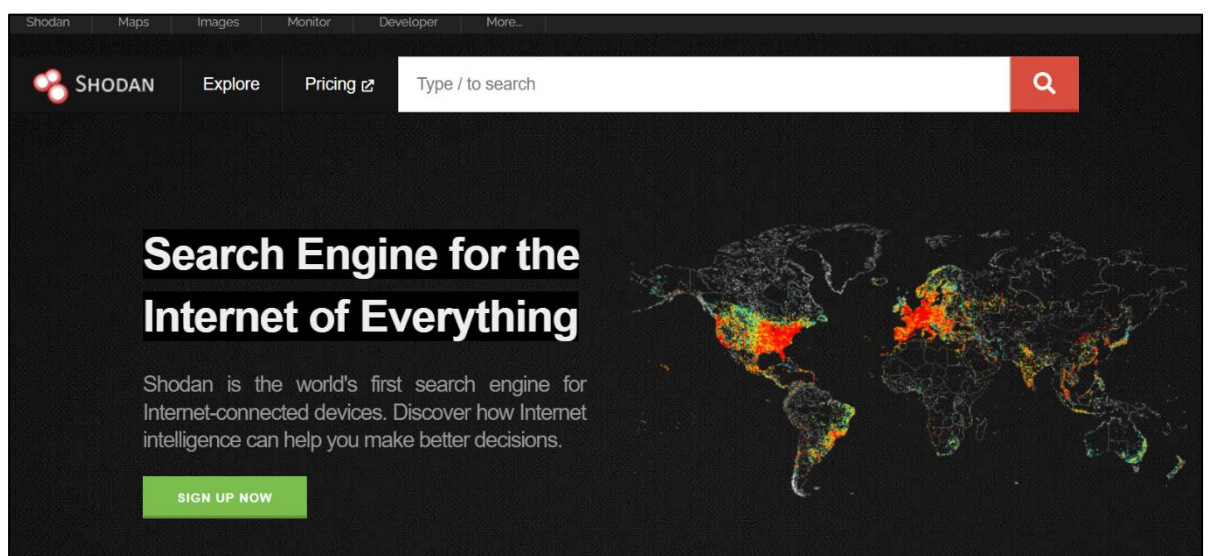


Fig 7: Shodan Search

4. Censys:

- Sign up at <https://search.censys.io/> (Warner, 2023).

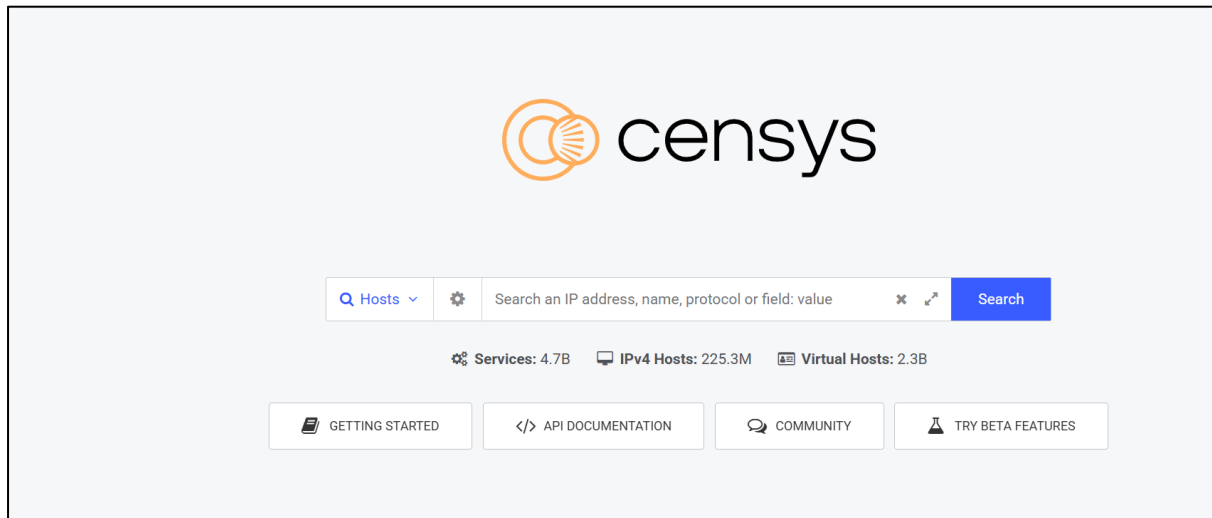


Fig 8: Censys Search

5. Tor Browser:

- Tor browser can be manually downloaded from “ <https://www.torproject.org/>” (Brave Software Inc, 2025).
- But for this project , TOR was accessed via Brave browser
- So first install “brave” browser from <https://brave.com/download/> and install the browser.
- Once installation is done the tor browser can be accessed by clicking on “**New private window with Tor**” from the brave menu.

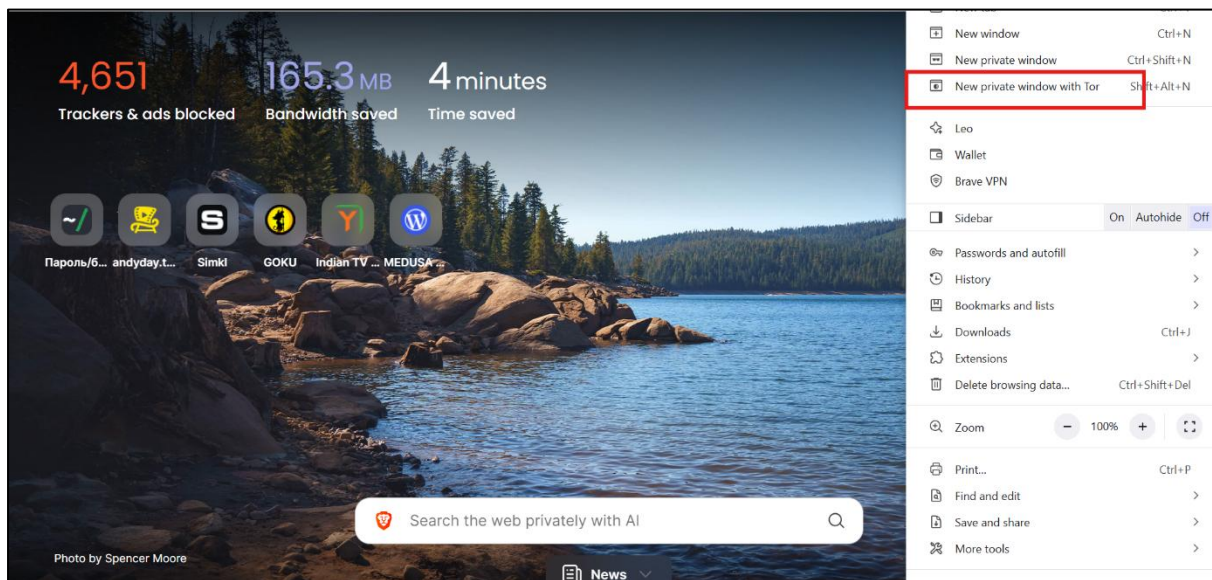


Fig 6: Brave Browser

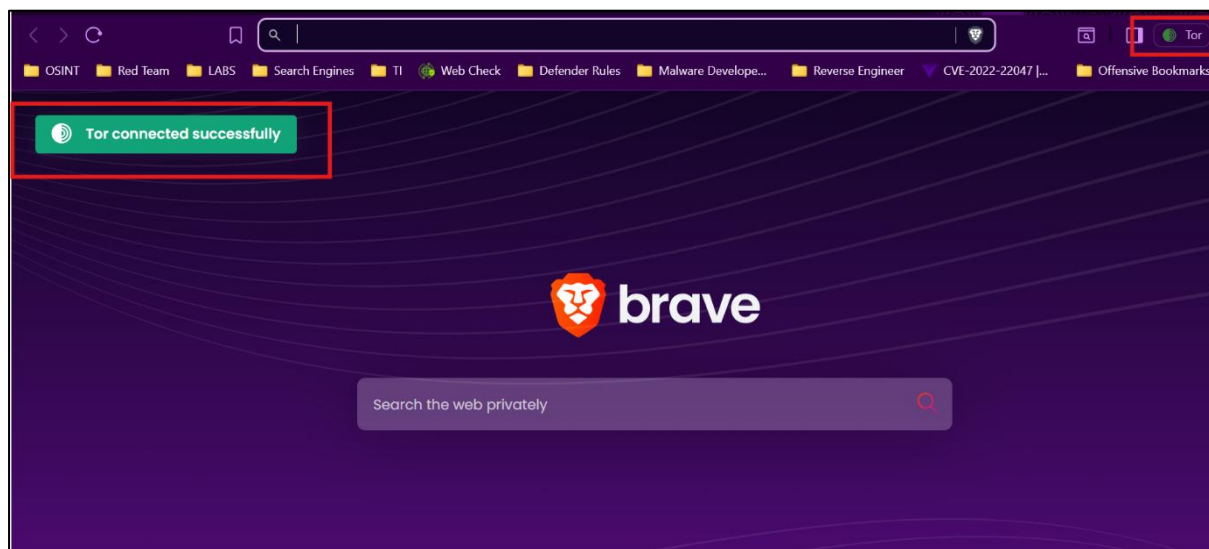


Fig 6: TOR connection on Brave Browser

References

Brave Software Inc (2025). Brave Software. [online] Brave. Available at: <https://brave.com/> [Accessed 12 Aug. 2025].

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Tenable.com. (2025a). Install Tenable Nessus (Tenable Nessus 10.9). [online] Available at: <https://docs.tenable.com/nessus/Content/InstallNessus.htm#:~:text=There%20is%20a%20single%20Tenable,Tenable%20Nessus%20product%20is%20installed> . [Accessed 14 Aug. 2025].

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