SAFEGUARDING WI-FI NETWORKS

OBJECTIVE

The objective of this report is to show the importance of safeguarding Wi-Fi networks.

Wi-Fi is a family of wireless network protocols based on the IEEE 802.11 family of standards, which are commonly used for local area networking of devices and Internet access, allowing nearby digital devices to exchange data by radio waves.

The rising cybersecurity threats and network hackings worldwide have increased the importance of wireless network security solutions across global industries. Black hat hackers break into an organization's computer networks and security protocols, spreading malware, stealing or modifying data, and even destroying it.

 Safeguarding of Wi-Fi is required to prevent unauthorized access, protect sensitive data, and ensure the integrity and security of connected devices and communications.

TOOLS

In this report we are going to use VPN to show the procedure of safeguarding of Wi-Fi network.

A virtual private network(VPN) is a mechanism for creating a secure connection between a computing device and a computer network, or between two networks, using an insecure communication medium such as the public Internet.

METHODOLOGY

In this the steps involved are:

1. We should use strong and lengthy passwords

2. Using VPN is a must for Wi-Fi protection

3. The Firewall should be setup and configured properly.

PROOF OF CONCEPT
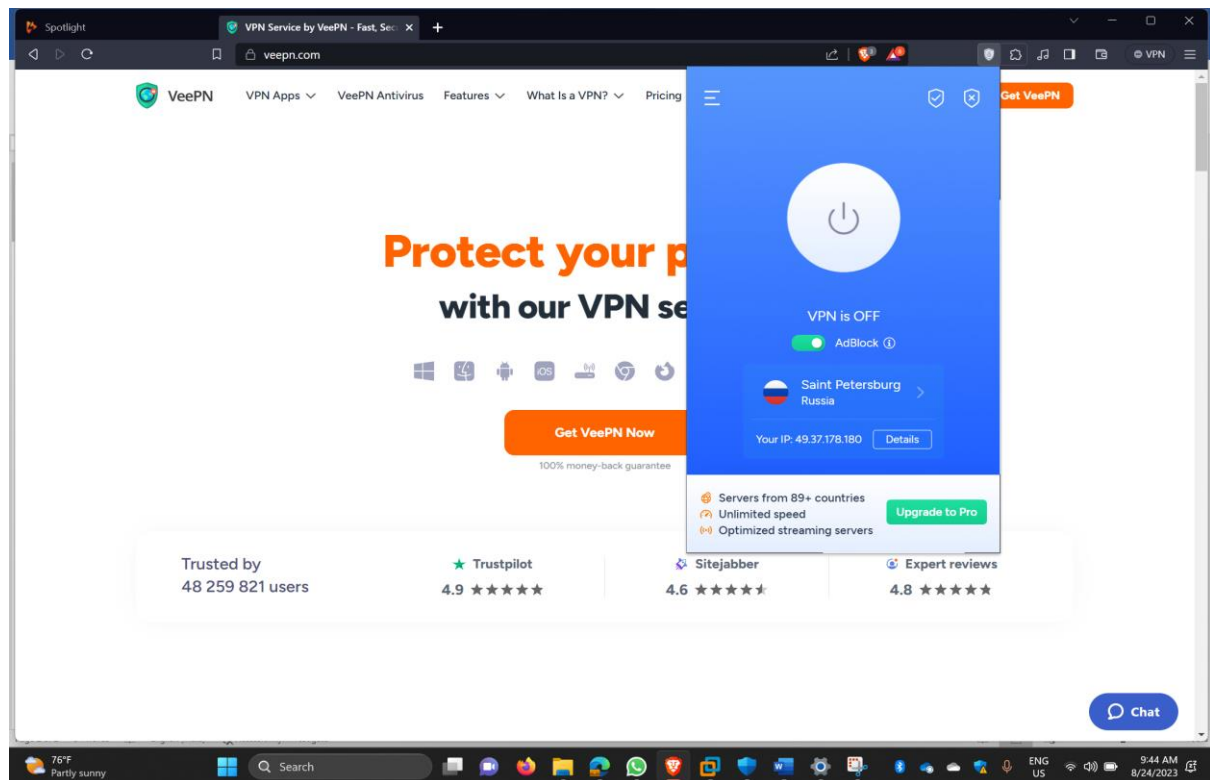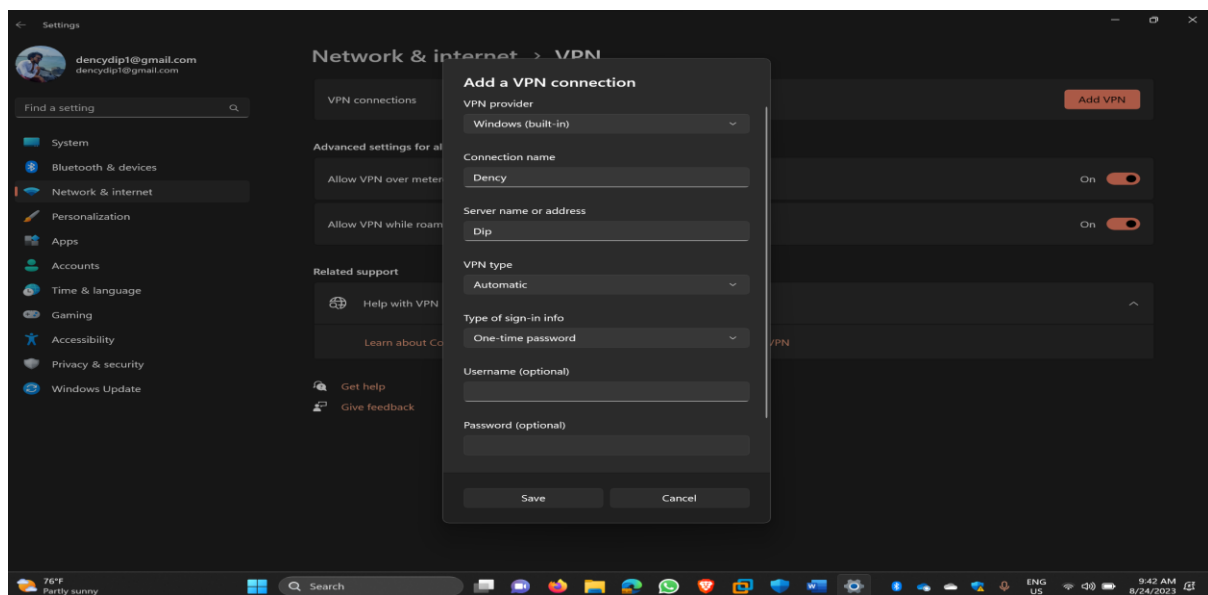
CONCLUSION

In conclusion, prioritizing the security of Wi-Fi networks through strong encryption, regular updates, and user awareness is essential to create a safer digital environment, guarding against potential breaches, data theft, and cyber threats.