

Home Network Security Analyzer

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Introduction

The Home Network Security Analyzer is a tool to find devices and determine their security on Home Networks. The application is provided through a web interface. It is implemented in Python and uses Nmap, Flask, NIST National Vulnerability Database API.

Nmap

The Nmap tool is used via a python library to discover hosts on a network and obtain information on the software used and their identifiers which can be used with the NVD API to search for known vulnerabilities.

NVD API

The NIST National Vulnerability Database offers an API to search for vulnerabilities. The Home Network Security Analyzer uses a python library to access the NVD API and search for vulnerabilities associated with a device and its running operating system, services, software, etc.

Flask

As the Home Network Security Analyzer is intended for easy use I have opted for a web interface implemented in Flask. This will provide the application in a simple interface that the end user will most likely be familiar

insert visuals/graphics to break up text