Docs on SwarmLab.io!

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Lab docs

1. Prepare your development and test environment

1.1. Install docker



Το Docker είναι μια πλατφόρμα λογισμικού ανοιχτού κώδικα που υλοποιεί Εικονικοποίηση (Virtualization) σε επίπεδο Λειτουργικού Συστήματος.

2. IoT Docs

2.1. Intro IoT



How It Works, Apps, Swarm: The Five Principles of Swarm Intelligence

3. Sec Docs

3.1. Scan and network statistics



This tutorial demonstrates some common **nmap** port scanning scenarios and explains the output.

3.2. Network analysis



tcpdump is a common packet analyzer that runs under the command line. It allows the user to display TCP/IP and other packets being transmitted or received over a network to which the computer is attached. Distributed under the BSD license, tcpdump is free software.

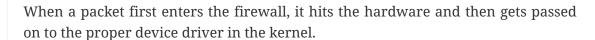
3.3. Network Filter



Netfilter offers various functions and operations for **packet filtering**, **network address** translation, and **port translation**, which provide the functionality required for **directing packets** through a network and **prohibiting packets** from reaching sensitive locations within a network.

iptables is a command line utility for configuring Linux kernel firewall implemented within the Netfilter project. The term "iptables" is also commonly used to refer to this kernel-level firewall. It can be configured directly with iptables, or by using one of the many

3.3.1. Traversing of tables and chains





Then the packet starts to **go through a series of steps in the kernel**, before it is either **sent to the correct application** (locally), or **forwarded to another host** - or whatever happens to i

3.4. Iptables with shorewall! - Three-Interface Firewall



Shorewall is an open source firewall tool for Linux that builds **upon the Netfilter** (**iptables/ipchains**) system built into the Linux kernel, making it easier to manage more **complex configuration schemes** by providing a higher level of abstraction for describing rules using text files.

3.5. virtual private network (VPN)



A virtual private network (VPN) extends a private network across a public network, and enables users to send and receive data across shared or public networks as if their computing devices were directly connected to the private network.

3.6. SSH Tunneling



SSH Tunneling, is the ability to use ssh to **create a bi-directional encrypted network connection** between machines over which data can be exchanged, typically TCP/IP.