

# Lanka Education and Research Network

---



28<sup>th</sup> November 2016

Dilum Samarasinhe  
(LEARN)

---

**LEARN**

*National Research and Education Network of Sri Lanka*



# Overview

---

- Introduction
- Requirements
- Applications
- Features
- Packages



# Introduction

---

- Open-source distribution for firewalls and routers
- Free-BSD based
- Started in 2004 based on m0n0wall
- Powerful and flexible firewalling and routing platform
- Latest release is version 2.3 released in 2016/10



# Requirements

---

- 100Mhz Pentium CPU,
- 128MB RAM,
- 1GB Hard driver
- Latest Versions require the x86-64 architecture



# Applications

---

- Firewall
- Router
- Captive portal
- VPN Appliance
- VOIP Appliance
- Packet Sniffer



# Features

---

- Firewall & Routing
  - Stateful firewall
  - Network Address Translation
  - Filtering by source/destination IP address, protocol, OS/network fingerprinting
- Functionality and connectivity
  - VLAN (802.1q)
  - DHCP server and relay
  - IPv6 support



# Features

---

- Management
  - RRD graphs reporting
  - Traffic shaping and filtering
  - Real-time information using Ajax
- Other In-Built features
  - VPN
  - Dynamic DNS
  - Radius/LDAP
  - Captive Portal
- Package Support



# Packages

---

- Snort
- OpenBGPD
- Squid
- NtopNG
- Nagios
- NMAP
- Iperf
- Asterisk



# Lanka Education and Research Network

---

Thank You

Dilum Samarasinghe/LEARN

Email: [dilum@learn.ac.lk](mailto:dilum@learn.ac.lk)