

pfSense Course

Introduction - Introducing pfSense

Welcome!

This lesson introduces you to pfSense.

pfSense is a free, open source, feature rich firewall. Along with firewall services, it will also perform a variety of network and security related functions.

Although pfSense runs on FreeBSD, practically all management of the firewall after initial configuration is done through a nicely laid out web interface.

Initial setup is done with a convenient setup routine. Once you assign the interfaces and, if needed, IP addresses, you'll be good to manage via the web.

You can see a complete list of applications and features at <http://www.pfsense.org>. Scroll to the bottom and select Features from the footer menu.

- Virtual Private Networking or VPN Server
- High Availability
- Load Balancing
- Traffic Shaping
- Unified Threat Management (UTM) Device
- Firewall / Router
- Domain Name System (DNS) and Dynamic Host Configuration Protocol (DHCP) Server
- Intrusion Detection System and Intrusion Prevention System (IDS / IPS)
- Transparent Caching Proxy
- Web Content Filter
- Stateful Packet Inspection (SPI)
- GeoIP blocking
- Anti-spoofing
- Virtual Local Area Network (VLAN) support
- Virtual Private Networking (VPN) with many options
- Snort or Suricata based IPS/IDS
- Emerging Threats Database
- IP Blacklist Database
- Deep Packet Inspection
- Open source add-ons
- Many enterprise reliability and user authentication options
- Web content filtering options including Domain Name blacklisting (DNSBL)
- Great web based configuration management console
- System security options
- Copious reporting options

Many, many enterprise products from companies like Cisco, Juniper, Fortinet, WatchGuard, and Palo Alto to name just a few would charge you huge money to license these features on their devices. Depending on the size of the infrastructure you want to protect, licensing could range from thousands to hundreds of thousands of dollars!

Earlier in my information technology career, I installed, configured, and maintained firewalls by several of those vendors for customers as a consultant.

Later, after finally learning of the outstanding benefits of open source software, and discovering pfSense, I installed pfSense virtual appliances in front of our entire IT infrastructure.

Whether you're a home user who enjoys learning about security, a network or system administrator at a Small to Medium Business (SMB) or want a flexible, free tool to secure your enterprise infrastructure or parts of it, pfSense is worth your consideration.

pfSense provides a free firewall in the form of software for your home or office that you can run on old hardware or virtualize, or if you want a preinstalled, cost effective offering direct from netgate, pfSense has you covered.

I have an ST-1100 on its way for my home. This would be adequate for a home or very small business of up to about 10 people. If you have a larger office, you could get an SG-3100, or SG-5100. If you have a large business, consider the full-fledged, High Availability XG series.

In the coming lessons, you'll learn how to download, install, and configure pfSense to protect your home or business.