pfSense

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Adam Thompson, athompso@athompso.net

pfSense: Who

You want a dedicated firewall

You want to run UNIX

You want/need the security of OpenBSD, but...

You still want a GUI to manage it

You don't want to (or can't) spend $10k

pfSense: What

Software-based firewall

Forked from m0n0wall 7 years ago

Based on FreeBSD

Web-based management GUI

Add-on packges

Native IPv6 in next release (2.1), available now in
  beta

pfSense: Where

Ordinary PCs

High-end servers

Embedded systems (ALIX, PCEngines, etc.)

VLAN'd, LAG'd networks

Multi-WAN, multi-LAN

Boots from CompactFlash, USB, ATA, SCSI, RAID, etc.

Embedded edition doesn't need VGA or HDD

pfSense: When

Install takes approx. 10 minutes

Can replace most routers

Supports IDS/IPS via Snort

Lacks on-the-wire anti-virus

HA state synchronization

Free: no additional licenses!

Works with dissimilar hardware!

pfSense: Why

BSD License

FreeBSD kernel & userland

OpenBSD's pf(4) packet filtering engine

Free, but commercial support available

pfSense: Variants

LiveCD

Installable ISO

    same image as LiveCD

Embedded

    dd(1) to CompactFlash card

    Serial console

Memstick

    Boots from USB

    dd(1) to USB removable media

    may also work on other media

pfSense: Initial Setup

Boot from media

Choose boot options, if needed

Choose **I**nstall or **C**ontinue with LiveCD

Set up VLANs, if needed

Select WAN interface

Select other interfaces, if needed

Continue configuration with web-based GUI

pfSense: Demonstrate Installation

Demonstrate simple installation of pfSense

pfSense: HA / Clustering

HA support out-of-the-box, no license required

Master / Slave only, **NOT** Active / Active

Use Virtual IP of "CARP" type

Be careful if you also run Cisco HSRP on the same LAN; they use the same Ethertype!

Enter Slave IP & credentials on Master

Settings are automatically synchronized

≤3sec fail-over, ≤2sec fail-back

pfSense: Demonstrate HA

Live demo of HA features (using VMs)

pfSense: Captive Portal

Create local user(s),

Enable Captive Portal feature,

Done.

pfSense: Captive Portal Demo

Attempt to demonstrate Captive Portal

on the HA cluster, userids and settings are propagated automatically

pfSense: Competitors

m0n0wall

> The parent project; has diverged substantially with a large re-write two years ago

OpenBSD

> No GUI, no integration, but near-perfect control and security.

Untangle

> Linux-based, full-featured, but free version lacks features

pfSense: Links

www.pfsense.org - main website

portal.pfsense.org – commercial support site

www.bsdperimeter.com - commercial support (by the project founders)

www.xagyl.com - Canadian reseller of embedded systems (ALIX) that run pfSense well and silently