{Voyage} Linux

x86 Embedded Linux Distribution

http://linux.voyage.hk

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Introduction

- derived from Debian GNU/Linux

- runs on x86-based platform

  - low-end PC

  - PCEngines and Soekris embedded boards

- requires min. 128MB disk storage (CF card)

- suitable for:

  - firewall, WiFi access point, VoIP/PBX gateway, NAS, etc.

Features

- Distro features

  - stripped down Debian, using latest stable Debian

  - entend through apt package management

  - mount disk as read-only, /var/log in ramdisk - protect flash card from wearing out

  - Live CD, PXE boot install support

- Kernel features

  - customized for small size

  - wireless drivers

  - watchdog & temperature sensors

  - various netfilter patches from openwrt

  - openssl OCF (cryptodev) patch

Release History

Dec 2004	Voyage Linux project started
Feb 2005	0.1 - pre-Sarge (2.6.8 kernel)
Jul 2005	0.1 - Sarge (2.6.8 kernel)
Apr 2006	0.2 - Sarge (2.6.15 kernel)
Apr 2007	0.3.1 - Etch, Live CD (2.6.17 kernel)
Jul 2007	0.4.1 - Etch (2.6.20 kernel)
Jun 2008	0.5.2 - Etch (2.6.23 kernel)
Jul 2009	0.6.2 - Lenny, Debian Live (2.6.26 kernel)
Feb 2010	0.6.5 - Lenny, Voyage ONE (2.6.30 kernel)
Feb 2011	0.7.0 - Squeeze, Voyage MPD (2.6.32 kernel)
Jun 2011	0.7.5 - Squeeze (2.6.38 kernel)
Oct 2010	0.8.0 - Squeeze (3.0.0 kernel)

Media

"Voyage is a very stripped-down Debian Linux... With Voyage you have the entire world of Debian available to you, so customizing your own gear is easy. It's great for firewalls and routers, and specialized servers that need a small footprint."

-- Carla Schroder, author of Linux Networking Cookbook

Installation Methods

1. Tarball distribution
   - install from existing Linux system
   - transfer to disk media (e.g. CF)

2. Live CD
   - < 100 MB ISO image
   - Network install via PXE
     - use Live CD as PXE server

How people use Voyage Linux?

- Swedish WISP - Mesh Network & IP surveillance in Highway

- VoIP/Asterisk Appliance (Voyage ONE)

- Music Player Daemon (Voyage MPD)

- Australia ISP - Linux-vserver hosting

- Bandwidth Equalizer

- GPS-time sync

- 3G + Wireless Router

- Other unknown commercial, academic and personal use

Voyage MPD & ONE

✳ **Voyage MPD**

★ Music playback server

★ Playback music via external USB DAC or sound card

★ Support USB Audio Class 2 and 24-bit/192kHz sampling rate

★ Most successful product

✳ **Voyage ONE**

★ VoIP appliance

★ incl. Asterisk

Future Development

- Current release - version 0.8.0

- Next release - version 0.8.5

  - Support latest kernel (>= 3.2)

  - Debian "squeeze" based

- Planning ...

  - Enhance WebGUI (Voyage MPD)

Thank you!