

## iMedia WRAP Linux Distribution Overview.

### General Notes

**iMedia Linux** is a Linux distribution used in streaming encoders/servers and Mini-Box embedded systems by **iTuner Networks**<sup>1</sup>. **iMedia Linux** distribution aims for a small footprint installation, stability and usability on small disk space and memory restrictions. For a overview of **iMedia** distribution features visit:

<http://www.mini-box.com/site/resources/html/linux-page.html>

**iMedia Linux** is a battle hardened Linux operating system, a stable and small footprint distribution used for more than 5 years in various computing environments.

### iMedia WRAP features

**iMedia WRAP** distribution is a showcase of the larger **iMedia** distribution which makes installation of WRAP and other i586 based boards easier.

The distribution works on VIA boards, WRAP boards and many other boards but the existing packages fits only the router/server appliance target and has been designed to run in restricted disk spaces and can be installed on Compact Flash storage because all logging is made on special files which basically are a circular memory buffers. Also **iMedia Linux** features a modified version of ReiserFS a journaling filesystem which will ensure better handling of filesystem errors and a faster boot time.

The distribution is a CDROM image that must be written on a CD and will allow the customisation of the packages that are written into the storage device (Compact Flash or other storage device). Usually the install program is used to install a master copy on a Compact Flash and then duplicate this install to other compact flashes.

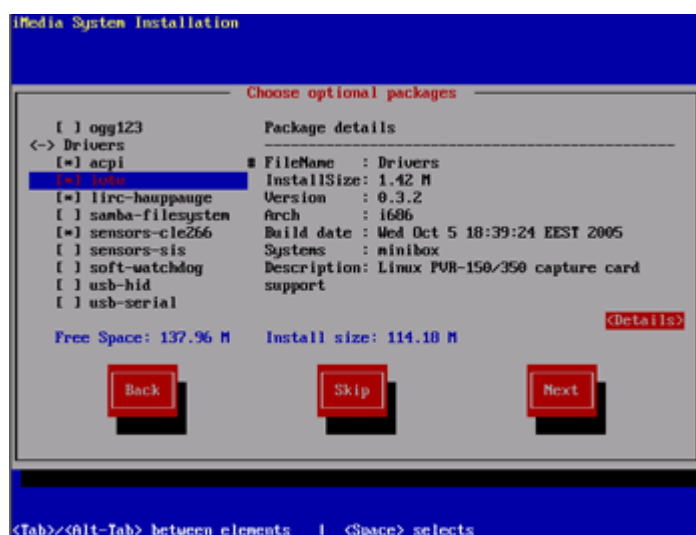


Figure 1 - Screenshot of packages selection screen

1 Visit [www.ituner.com](http://www.ituner.com) and [www.mini-box.com](http://www.mini-box.com) for more information.

## Overview of features

- **Kernel 2.4.33** with O(1) scheduler, low latency and other patches (see below)
- **SSH, FTP, DNS, TELNET, DHCP, TFTP** servers
- **NDISWRAPPER** which offers the ability to use windows drivers for network cards. This makes this distribution support a big range of wireless, minipci, usb network cards.
- **IPTABLES** firewall
- Ability to mount Windows shares and network file systems
- Quick boot times
- Journaling filesystem
- Embedded logging – logs are kept in memory in a circular buffer. Optionally logs can be saved to remote linux machines thru syslog daemon.
- Small size from **6 Mb** (includes basic networking/routing/commands) to **64 Mb**

Current release of **iMedia WRAP (2.6.8)** distribution includes:

- kernel 2.4.33 with the following patches:
  - 00-patch-2.4.33-pre1
  - 01-patch-scheduler-preempt-lowlat-ckinteractivity.txt
  - 02-patch-read-latency2.txt
  - 03-patch-supermount-1.2.11a.txt
  - 04-patch-bootsplash.txt
  - 05-patch-ntfs.txt
  - 06-patch-v4l2.txt
  - 07-patch-via-padlock.txt
  - 08-patch-i2c-2.9.2.txt
  - 09-patch-apic-quiet.txt
  - 091-patch-decompression-messages-suppress.txt
  - 092-patch-framebuffer-logo.txt
  - 093-patch-kernel-version-output.txt
  - 094-patch-keyboard-silence.txt
  - 095-patch-pidwatcher-symbols.txt
  - 096-patch-minimal-reiserfs-journal.txt
  - 097-patch-squashfs-2.2-r2.txt
- ssh-server – small secure shell server
- samba-tools – tools for mounting using windows shares
- iproute - IP route tools
- strace – system call tracer
- ftpserver – small FTP server
- ltrace – library calls tracers
- iptables - IPTABLES Firewall
- tcpdump - tcpdump network traffic/packet analyser
- rsync - remote sync daemon
- samba-client - Client for mounting windows shares
- tftpd - small tftp server
- bzip2 - bzip2 compressor and uncompressor
- dhcpd - small dhcp server (Dynamic Host Configuration Protocol)
- ncftp - ncftp ftp client
- telnet-server - small telnet server
- nmap - nmap port probing
- dnssd - small dns server (Domain Name Server)

- lsof - lsof utility to list open file handles
- lynx - text mode internet browser
- diag - suite of linux utilities for diagnostic/basic management
- ntp-client - small client for ntp (Network Time Protocol)
- joe - text editor
- mc - Midnight commander file explorer
- mtr - mtr a better traceroute implementation
- bc - bc text mode calculator
- wireless-tools - tools to configure wireless network adapters
- ndiswrapper-tools - tools to install windows drivers for using in ndiswrapper
- ndiswrapper - ndiswrapper kernel module
- nfs-filessystem - allows mounting remote linux filesystems
- watchdog - kernel watchdog which can restart the box in case of a freeze
- iptables-kernel - iptables firewall kernel modules
- cbq - class based queueing traffic shapper
- htb - htb queueing traffic shapper
- nl2511-wireless - driver for [NL-2511MP](#) wireless network adapter
- wistron-wireless - driver for [Wistron CM9 Atheros miniPCI](#) wireless network adapter
- ubiquiti-wireless - driver for [Ubiquiti Super Range 2 SR2](#)

#### Note

This release is free and it's available for download on our site. We plan to release soon a commercial version. The differences between the two versions can be seen below.

Feature	iMedia Wrap (free)	iMedia Wrap (commercial)
<i>Webmanagement interface like m0n0wall</i>	No	Yes
<i>SquashFS (compressed filesystem)</i>	No	Yes
<i>Number of Packages</i>	36	78+
<i>Serial console</i>	No	Yes
<i>Technical support</i>	Limited	Full
<i>Firewall</i>	Yes (without interface)	Yes (with web interface)
<i>Embedded logging</i>	Yes	Yes
<i>Journaling filesystem</i>	Yes	Yes
<i>NDISWRAPPER support</i>	Yes	Yes