

# FLISOL 2015



## Libera tu Router !!!

conociendo OpenWRT  
[www.openwrt.org](http://www.openwrt.org)

**OpenWrt**  
Wireless Freedom



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# Que es OpenWRT

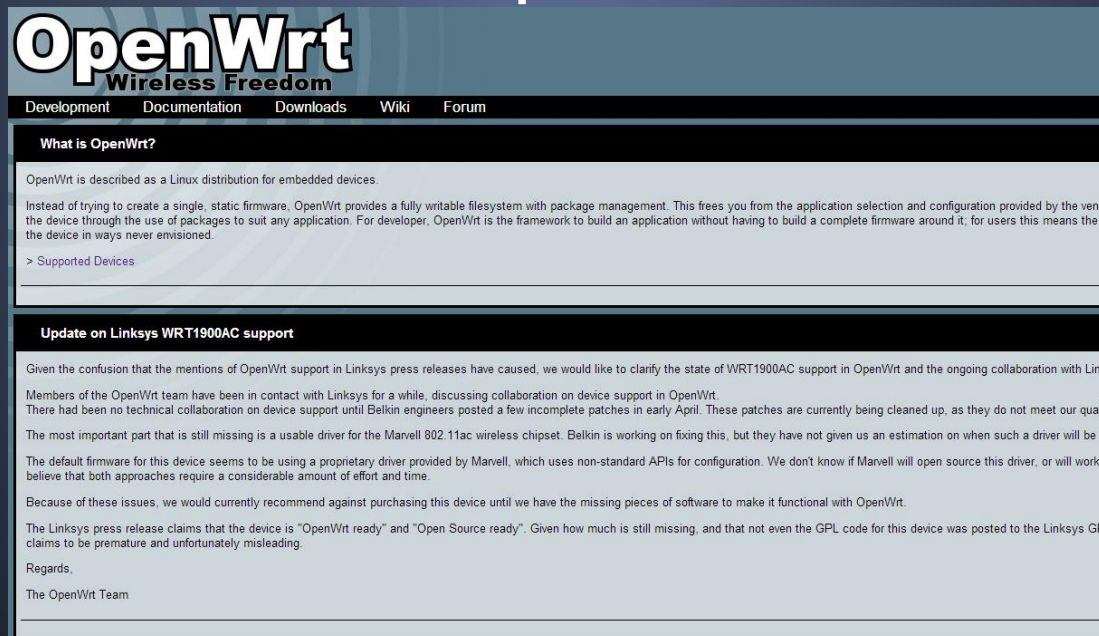
OpenWRT es una distribución linux basada en los kernels 2.4.x/2.5.x/2.6.x,3.10, de tamaño pequeño, aproximadamente entre 2,5 y 4 megas, y esta orientada a embeberse en dispositivos de comunicación comerciales, permitiendo reemplazar el software privativo y limitado de los mismos por una distribución 100% personalizable.

# Paquetes

OpenWRT cuenta hoy con un sin fin de aplicaciones desarrolladas como para cualquier version de linux normal entre ellas, apache, php5, amule, bittorrent, asterisk, nginx, openssl, ftpserver, openssh-server, openvpn, iptables, samba, perl, python, ruby, twisted, ipsec, pptp, ppp.

# Buscando Nuestro Router

Ingresando de Supported Device buscamos obtener la versión de firmware que debemos instalar en nuestro dispositivo.



**OpenWrt**  
Wireless Freedom

Development Documentation Downloads Wiki Forum

**What is OpenWrt?**

OpenWrt is described as a Linux distribution for embedded devices.

Instead of trying to create a single, static firmware, OpenWrt provides a fully writable filesystem with package management. This frees you from the application selection and configuration provided by the vendor the device through the use of packages to suit any application. For developer, OpenWrt is the framework to build an application without having to build a complete firmware around it; for users this means the ability to use the device in ways never envisioned.

> [Supported Devices](#)

**Update on Linksys WRT1900AC support**

Given the confusion that the mentions of OpenWrt support in Linksys press releases have caused, we would like to clarify the state of WRT1900AC support in OpenWrt and the ongoing collaboration with Linksys.

Members of the OpenWrt team have been in contact with Linksys for a while, discussing collaboration on device support in OpenWrt. There had been no technical collaboration on device support until Belkin engineers posted a few incomplete patches in early April. These patches are currently being cleaned up, as they do not meet our quality standards.

The most important part that is still missing is a usable driver for the Marvell 802.11ac wireless chipset. Belkin is working on fixing this, but they have not given us an estimation on when such a driver will be produced.

The default firmware for this device seems to be using a proprietary driver provided by Marvell, which uses non-standard APIs for configuration. We don't know if Marvell will open source this driver, or will work on making it open source. We believe that both approaches require a considerable amount of effort and time.

Because of these issues, we would currently recommend against purchasing this device until we have the missing pieces of software to make it functional with OpenWrt.

The Linksys press release claims that the device is "OpenWrt ready" and "Open Source ready". Given how much is still missing, and that not even the GPL code for this device was posted to the Linksys GPL repository, we believe these claims to be premature and unfortunately misleading.

Regards,  
The OpenWrt Team

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# Algún Dispositivo lo Soporta ?

3Com  
4G Systems  
7Links  
8devices  
Abicom International  
Actiontec  
Accton  
ADB  
Airlink101  
Alcatel-Sbell  
ALFA Network  
Allnet  
Alpha Networks  
ARC Flex  
Arcadyan / Astoria  
AsiaRF  
Asus  
Atmel  
Avm  
Aztech  
Belkin  
BT  
Buffalo  
Catch Tec  
Cisco  
Cobalt Networks  
Compex  
Comtrend  
D-Link  
Devolo  
Dragino  
Draytek  
EasyLink  
Edimax  
EnGenius  
Embedded Wireless  
Fon  
Freecom  
Gateway  
Gateworks  
Gigaset  
HAME  
Hi-Link  
HiWiFi  
HooToo  
Huawei  
Intellidesign  
Intenso  
ijPlus  
Kingston  
Linksys  
Meraki  
Mercury  
MikroTik  
Multilaser  
NetComm  
Netgear  
Nexx  
On Networks  
Option  
Pacific Networks  
PC Engines  
Petatel  
Pirelli  
Planex  
Planex  
Poray  
Qemu  
Qi hardware  
Qihoo hardware  
RaidSonic  
Redwave  
Rosewill  
Sagem  
Seagate  
Sercom  
SFR (Société  
Française de  
Radiotéléphonie)  
Skyline  
SimpleTech  
Sitecom  
SMC  
Sparklan  
Teltonika  
Telsey  
Tenda  
Texas Instruments  
TP-Link  
Trendnet  
Turris CZ.NIC  
T-Com / Telekom  
Ubiquiti  
Unbranded  
Upvel  
US Robotics  
Vizio  
Western Digital  
ZBT  
Zcomax  
ZTE  
ZyXEL  
Supported Hardware -  
Devboard, Phones  
Allwinner Axx  
Atmel AT91SAM  
Freescale i.MX23/i.MX28  
Freescale MPC85xx  
Raspberry Pi Foundation  
Supported Hardware - NAS devices  
Medion  
Installing OpenWrt on a device you already own  
Looking to purchase a device to use with OpenWrt?  
Finding Firmware  
Older devices  
Unsupported devices

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# Versiones

## Binary Releases

The most recent OpenWrt releases are linked below. unless you know exactly what you do.

- [Barrier Breaker 14.07](#)  
Released: Thu, 02 Oct 2014
- [Attitude Adjustment 12.09](#)  
Released: Thu, 25 Apr 2013
- [Backfire 10.03.1](#)  
Released: Fri, 21 Dec 2012

# Mi Router TPLINK TL-WR1043ND

TP-Link

Model	Version	Status	Target(s)	Platform	CPU Speed (MHz)	Flash (MB)	RAM (MB)	Wireless NIC	Wireless Standard	Detachable Antennae	Wired Ports	VLAN Config	USB	BATTERY (Powered)
TL-WR1043ND	v2	14.07	ar71xx	Atheros QCA9558	720	8	64	Atheros QCA9558 (integrated)	b/g/n	3x	5 gigE	Yes	1x 2.0	

# Archivo a usar en mi caso

**Openwrt-ar71xx-generic-tl-wr1043nd-v1-squashfs-factory.bin**

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# Iniciar Proceso de Upgrade

Ingresamos la sección de upgrade de nuestro router comercial y desde aquí seleccionamos el firmware que corresponde a nuestro router



The screenshot shows the TP-LINK web interface. On the left is a navigation menu with the following items: Status, Quick Setup, QSS, Network, Wireless, DHCP, Network Sharing, Forwarding, Security, and Parental Control. The main content area is titled "Firmware Upgrade" and contains the following information:

File:	<input type="text" value="D43\11-21-10-r15778\factory-to-ddwr.t.bin"/>	<input type="button" value="Durchsuchen_"/>
Firmware Version:	3.11.5 Build 100427 Rel.61427n	
Hardware Version:	WR1043N v1 00000000	

At the bottom of the section is an

# Acceso Inicial

Si todo salio bien nos encontraremos con esta pantalla.



The screenshot shows the OpenWrt web interface for a device named AIORIA. The top status bar indicates the system is running OpenWrt Attitude Adjustment 12.09 with a load average of 0.00, 0.06, 0.05 and auto-refresh is active. The main navigation menu includes 'Estado', 'Sistema', 'Red', and 'Cerrar sesión'. The 'Estado' page is selected, showing a 'Descripción general' tab and other sub-tabs like 'Cortafuego', 'Rutas', etc. The 'Estado' section is divided into 'Sistema' and 'Memoria'.

Sistema	
Nombre del router	AIORIA
Modelo de router	TP-Link TL-WR1043N/ND v1
Versión del firmware	OpenWrt Attitude Adjustment 12.09 / LuCI 0
Versión del Kernel	3.3.8
Hora local	Fri Feb 14 11:34:38 2014
Tiempo activo	0h 6m 8s
Carga Media	0.00, 0.06, 0.05

Memoria	
Total disponible	19476 KB / 29212 KB (66%)
Libre	12528 KB / 29212 KB (42%)
En caché	6948 KB / 29212 KB (23%)
En búfer	0 KB / 29212 KB (0%)

# Sirve para ?

1. Cliente Torrent
2. Cliente VPN
3. Cliente SAMBA
4. Cliente FTP
5. Cliente SSH
6. Cliente MYSQL
7. Cliente Postgres
8. Cliente SQLite
9. Cliente RSYNC
10. Cliente Telnet
11. Cliente LDAP

1. Servidor de Portal Captivo
2. Servidor Radius
3. Servidor Multimedia
4. Servidor PBX
5. Servidor SIP
6. Servidor de Autenticación Kerberos
7. Servidor de Impresión
8. Servidor Python
9. Servidor NFS
10. Servidor NUPSM
11. Servidor de Autenticación OpenLDAP
12. Servidor P2P
13. Servidor DLNA
14. Servidor Ruby
15. Servidor Proxy
16. Servidor XML RPC
17. Servidor Jabber
18. Servidor Zabbix

1. Audio Stream
2. Video Stream
3. Servidor PHP
4. Servidor MySQL
5. Servidor PostgreSQL
6. Servidor SQLite
7. Servidor FTP
8. Servidor SSH
9. Servidor SAMBA
10. Servidor IRC
11. Servidor DNS
12. Servidor de BACKUP

# Instalando Paquetes

Desde el menú Software podemos previamente actualizando el repositorio buscar e instalar las aplicaciones que necesitemos, pero cuidado !!, podremos instalar según el espacio en memoria de nuestro dispositivo.

AIORIA | OpenWrt Attitude Adjustment 12.09 | Carga: 0.08 0.07 0.05

Estado | **Sistema** | Red | Cerrar sesión

Sistema | Administración | **Instalación de programas** | Arranque | Tareas programadas | Puntos de montaje | Configuración de LEDs | Copia de seguridad / C

## Instalación de programas

Acciones | Configuración

Downloading [http://downloads.openwrt.org/attitude\\_adjustment/12.09/ar71xx/generic/packages/Packages.gz](http://downloads.openwrt.org/attitude_adjustment/12.09/ar71xx/generic/packages/Packages.gz).  
Updated list of available packages in /var/opkg-lists/attitude\_adjustment.

Espacio libre: **15% (1.05 MB)**

Descargar e instalar paquete:   Aceptar

Filtro:

### Estado

Paquetes instalados | Paquetes disponibles

	Nombre del paquete	Versión
<a href="#">Desinstalar</a>	base-files	117-r36088
<a href="#">Desinstalar</a>	blkid	2.21.2-1
<a href="#">Desinstalar</a>	block-mount	0.2.0-9
<a href="#">Desinstalar</a>	busybox	1.19.4-6
<a href="#">Desinstalar</a>	cifsmount	5.4-1
<a href="#">Desinstalar</a>	curl	7.29.0-1
<a href="#">Desinstalar</a>	dnsmasq	2.62-2
<a href="#">Desinstalar</a>	dropbear	2011.54.2

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# Administración de Servicios

podemos controlar qué servicios inician o que aplicaciones e inclusive agregar nuevas al inicio.

AIORIA | OpenWrt Attitude Adjustment 12.09 | Carga: 0.03 0.05 0.05

Estado Sistema Red Cerrar sesión

Sistema Administración Instalación de programas Arranque Tareas programadas Puntos de montaje Configuración de LEDs Copia de seguridad / Gr

## Scripts de inicio

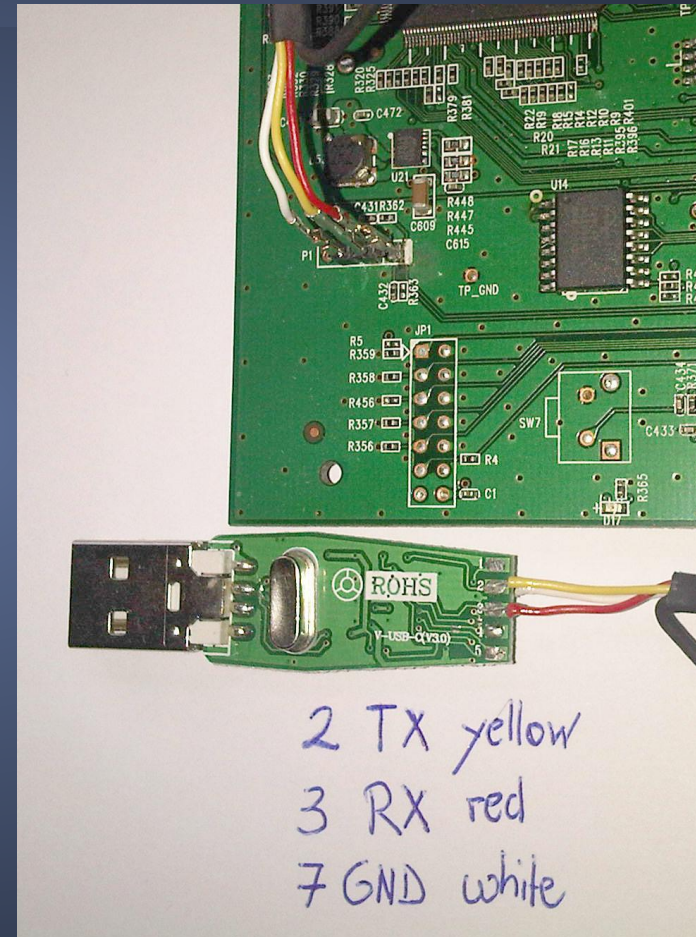
Gestione los scripts de inicio. Los cambios serán aplicados tras reiniciar el equipo.  
**ADVERTENCIA: ¡Si desactiva scripts de inicio esenciales como "network", su equipo puede no arrancar o quedar inaccesible!**

Prioridad de arranque	Nombre del script de inicio	Activar/Desactivar
5	defconfig	<input checked="" type="checkbox"/> Activado
5	luci_fixtime	<input checked="" type="checkbox"/> Activado
10	boot	<input checked="" type="checkbox"/> Activado
11	ubus	<input checked="" type="checkbox"/> Activado
20	fstab	<input type="checkbox"/> Desactivar
20	network	<input checked="" type="checkbox"/> Activado

# A no preocuparse !!!

si algo sale mal todos los equipos routers, comerciales o en su gran mayoría traen un conector serie RS232, a veces accesible y otras veces en la placa principal. y permite recuperar la instalación original del equipo.

basta con conectarlo a la pc con putty o una terminal y correr el comando correspondiente para recuperarlo o reescribir el firmware original



# Explorando el Repo

<http://downloads.openwrt.org/>

## Index of /

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<a href="#">../</a>			
<a href="#">attitude_adjustment/</a>	11-Apr-2014	09:35	-
<a href="#">backfire/</a>	28-Sep-2012	19:50	-
<a href="#">backports/</a>	28-Sep-2012	19:53	-
<a href="#">docs/</a>	08-Nov-2011	12:29	-
<a href="#">kamikaze/</a>	28-Sep-2012	19:16	-
<a href="#">people/</a>	09-Jun-2009	09:53	-
<a href="#">reference/</a>	06-Aug-2005	01:10	-
<a href="#">snapshots/</a>	23-Oct-2012	14:51	-
<a href="#">sources/</a>	03-Jan-2013	13:49	-
<a href="#">utils/</a>	06-Apr-2008	15:50	-
<a href="#">whiterussian/</a>	28-Sep-2012	19:13	-
<a href="#">favicon.ico</a>	02-Jul-2005	04:41	0

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# Links

<http://www.openwrt.org>

<http://wiki.openwrt.org>

<http://downloads.openwrt.org/>

Presentación

<https://docs.google.com/presentation/d/1OF5hr8dHfcZ5uWXf2A2PoIX2CaR2baug1949KQn6GMk/pub?start=false&loop=false&delayms=3000>

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# Gracias por su Atención Preguntas !!!



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