Upgrade your router, Part 2
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Last month we covered the basic things you
need to do to your home router from a security
point of view.

This month we explore what you CAN do to
enhance your router beyond what it could do
when it was brand new out of the box. How is
that possible? Simple – as we covered last
month, companies don't make a lot of money
selling these devices and so are not motivated to do much to them once they've left the
factory. The open source community have a whole different operating system for it
based on Linux.

To see if your router can be upgraded, just put in to Google the model and the words
"alternative firmware" and you should see many results. One website, DSLreports.com,
give me many choices each with different features.
http://www.dslreports.com/faq/10537

Wifibox »www.linksysinfo.org
- easy to use, home user oriented, good www interface
Sveasoft »www.sveasoft.com/modules/phpBB2
- oriented to the power user/WISP, focus on routing, repeaters
DD-WRT: »www.dd-wrt.com
- some advanced features VoIP, Kaid, etc.
OpenWRT »www.openwrt.org
- hacker's version, rw file system, for do-it-yourselfers
BatBox »www.batbox.org/wrt54g-linux.html
- easy to install distro that runs completely from RAM
HyperWRT: »www.hyperwrt.org
Tomato: »www.polarcloud.com/tomato

Since I had a problem in December with
Tomato firmware, I will use DD-WRT for
this process. Your choices will depend
on what is available for you. Going to
each of the websites and checking their
database for your exact model and
version will narrow down your choices.
On this website I clicked on the Router
Database link.

Putting in the model number WRT54G brings up many possibilities so that I had to narrow it down to mine. I found that info by logging into my router in a new tab in my browser as shown last month and on the top right of the screen – there it was: Firmware Version v3.0.

Scrolling down and selecting Revision 3 brought me two different builds with MANY choices and I selected the most recent one Build 14896 and just went with the standard generic. If I really wanted better performance with Voice Over Internet Protocol (VOIP) or setting up a Virtual Private Network (VPN) I would have selected one of those.
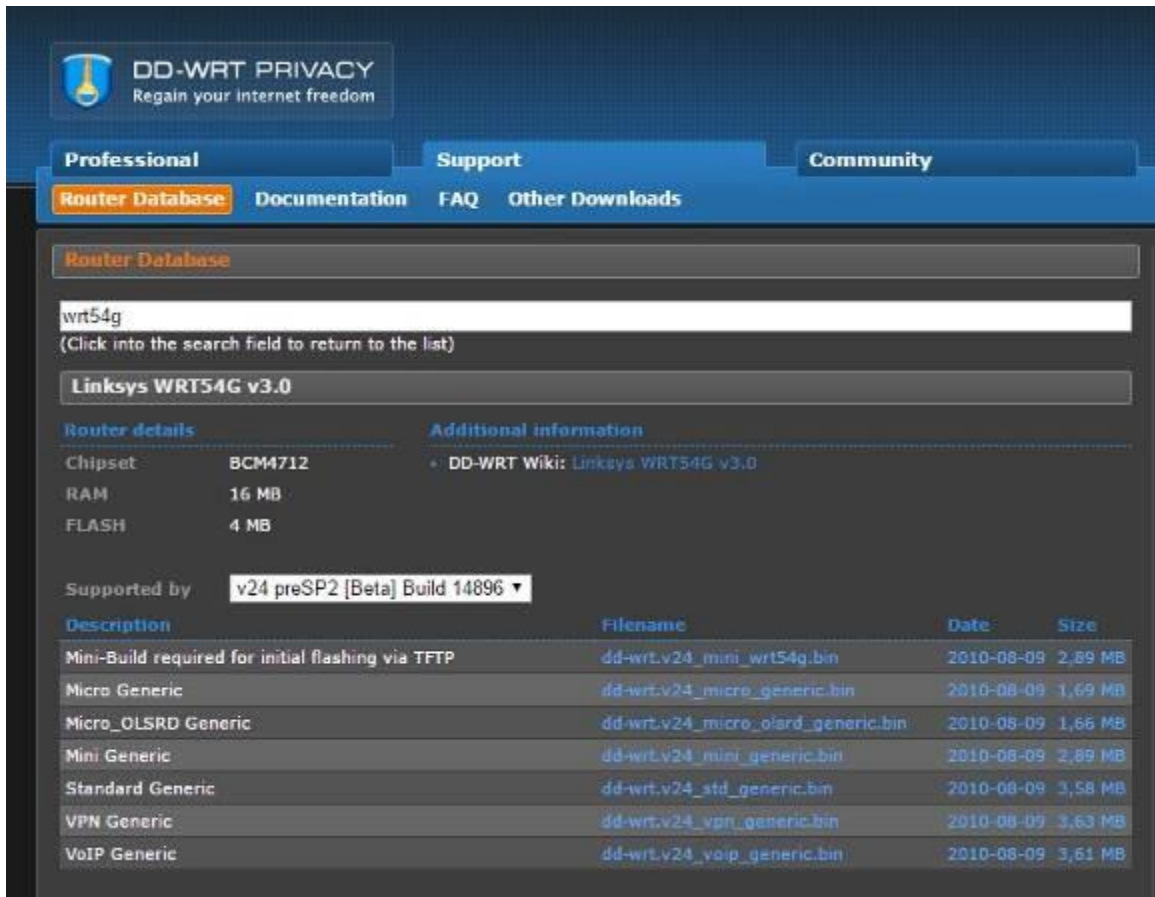
When I clicked on the .bin file I was sure to remember where it downloaded (for me it was my Downloads folder)

Now the critical step takes me back to my tab with the route where I click on Administration and the Firmware Upgrade option.

Here is where I click on Choose File and go to my downloaded .bin file. Critical now is do not have anything running on your computer and pray the power does not go out for the next few minutes as you press the Upgrade button.

What you are doing is erasing the "operating system" of your router and replacing it with a new one. You can see where any interruption could have serious consequences.

Everything went fine for me and I knew that because I lost my connection to the Internet and my router.

I was doing this wirelessly, so I had to reconnect to my router. First thing I notice is that my wireless router no longer has a password.
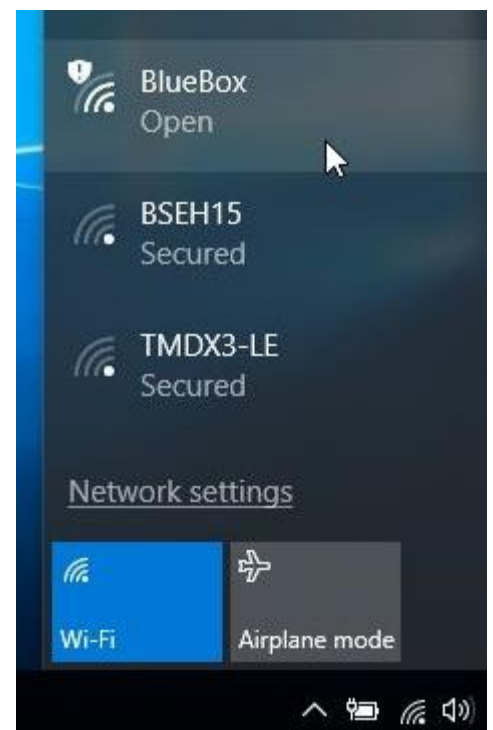
I connect to it anyway and open my browser to start the setup of my "new" router.

First thing I need to know is the default username and password to talk to my router. Reading the documentation on the DDWRT website I find a username of root and admin is the password.

access Open browser – same ip address will bring you to your new interface for your router. In order to change settings, you need to log in.

With this new firmware, your username has changed. The new username is now **root** and password is now **admin**.

You will FIRST want to change that – YOUR username and password and also create a WIRELESS password. Here's how we do it. Click on the Administration tab and then Management. Change the router Username and Password

to what you like (I used my first name as the username and my last name as the password).

Next, turn on your wireless security and set the password by clicking on Wireless tab and then Wireless Security and you want security on.

Wireless Security wl0

Physical Interface wl0 SSID [BlueBox] HWAddr [00:13:10:72:F0:60]

Security Mode	WPA2 Personal ▼
WPA Algorithms	TKIP ▼
WPA Shared Key	hotmyrealpassword ☑ Unmas
Key Renewal Interval (in seconds)	3600 (Default: 3600,

Save   Apply Settings

I prefer WPA2 and I used the same password I had before.

Click on Apply Settings

These basic steps apply to any router whose firmware can be replaced.