Proper setup for your private WIFI

Everyone seems to love wireless connections and I can certainly understand why. It's convenient and you don't have to deal with all those messy cables. Wifi does present some potential issues that you should be aware of though. If your wireless network is not secured then all your home computers and whatever devices that are connected either via wifi or Ethernet are exposed.

Besides security issues there is the constant problem of range. Most consumer grade routers will do a decent job of covering a house up to around 2,000 sq. feet or so assuming you have a wireless N router. If you have an older wireless G, it's significantly less and an ancient wireless B may cover 25 feet or less. There are a couple of routers out there that offer 800mW and 1W transmit power compared to the \sim 100mW you get from the average router. Check my publications page for the link in this expanded article. Antenna's and repeaters are usually more trouble than they are worth.

Now as to security; this is an all important step that an unbelievable amount of people just skip over. It's a simple enough process and should be the first thing you do when setting up a wireless network. Start by connecting your computer with an Ethernet cable (usually in the box with the router) to one of the LAN ports. Open your browser and type the IP in the address bar that is the default for your router which you can find in the setup guide that came with it. In most cases is 192.168.1.1. For an airport it's usually 10.0.1.1

Log in with the default username & password then you have access to all your settings. Open the administration page and change the router password first. Then open the wireless page and change the network name (SSID) to something that makes sense like your last name. Here you also can set your security and I suggest WPA2 with a pre shared key. If you want better control you can replace the stock firmware with DD-WRT which is what I use.

800 mW wireless router http://www.ampedwireless.com/products/tap-r2.html

1W wireless router http://www.radiolabs.com/products/wireless/networking/802.11N-speed-wireless-router.php