Are All Network Switches the Same?

Most people think that a network switch (the device you plug your network cables into) is a very simple device that helps split and share your network signals among multiple devices. At its most basic level that’s true. Switches though do much more. They assign what traffic goes to which device, they determine the best speeds of those devices and in more advanced switches can provide a host of features including adding QOS (Quality of Service), virtualization of your networks to isolate certain devices from one another (VLAN) and provide a trove of management capabilities and monitoring tools.

So do these added capabilities come with all switches? No. There are 4 different types of switches.

1. The most common switch is the “Unmanaged” switch. This is the most basic type and as the name implies there is no management capabilities built in. You buy the speed of switch you want, Gigabit or 100BASE-T, plug it in, connect your devices and it works. No intervention needed and as easy as plugging and unplugging cables.

2. The next level switch is called the “Plus” switch. This switch adds tremendous new capabilities including QOS, Vlan, Web configuration and network traffic monitoring. The Plus switch option is not well known to the average user but really is the sweet spot in switch capability and value. For a modest price increase (10–15% over unmanaged switches) you gain a level of control and management that is important to gaining best performance in todays media centric homes.

3. These are “Smart” Switches and “Fully Managed” Switches. The Smart switch builds on the capabilities of the “Plus” switch but adds more capabilities in areas of security management, traffic control, static routing, cable testing and outbound traffic monitoring to name a few. The Fully Managed Switch takes the Smart Switch to another level by providing a command line interface (CLI) that lets network administrators easily configure and deploy these switches in wide scale enterprise environments.

4. And lastly there are POE switches which are versions of Plus, Smart and Managed that provide power over the ethernet cabling to simply power network attached devices through the network cable. You will find POE versions in most versions of the Plus, Smart and Managed switch models.

So for the home user what switch would be best? Well if you have a simple home network and your use is basic email, web browsing and the like then the base Unmanaged switch will be fine. Buy the speed you want, plug it in and you are done. But if you are looking to have greater control and ability to manage what is happening in your network the Plus switch is the way to go. For a very modest price increase you get a huge jump in capability and performance.