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THE M&H MONITOR

Wireless Security

Tim Clarkin

Wireless Networking has made it incredibly easy for homes and businesses to eliminate having cables all over the place and allowed users the luxury of portable computer use. However, it also carries a new way for hackers to compromise your network's security for malicious purposes. Wireless networks can create an opening for anyone near your home or office building to try and steal data or use your internet connection without your permission or knowledge.

So, does this mean wireless networking is unsafe? No, but it does mean that it's critical to use the latest security standards. Most wireless routers have the security turned off by default, so there is nothing preventing someone from accessing the network's information and doing whatever they choose once inside. Using this option would be no different than running a network cable outside and putting up a sign that says "Free Network Access! Now With Confidential Data!" for anyone who passes by. Fortunately, there are several op-

tions for wireless security which can close the doors on hackers.

The first level of security available is called WEP. It consists of a short key using only numbers and the letters A-F and it was considered the standard in wireless security when it was developed in the late 1990s. Unfortunately, WEP is not nearly as secure as you would think. It is currently considered to be highly "crack-able", meaning that it is very easy for anyone with a basic knowledge of computers to break into it.

The next option for wireless security is something called WPA. This is the security option a home and business should be using. It involves using a pre-shared access key that all users need in order to connect. WPA allows for a security code using all letters of the alphabet, as well as numbers, which makes the key easier to remember and it is not easily hacked. WPA

will change the actual network key that is floating through the air as wireless traffic passes through the network making it extremely difficult for the average program to actually capture and decode the key. As long as you keep the security key from being too simple (IE. Using password) your data will be safe and secure.
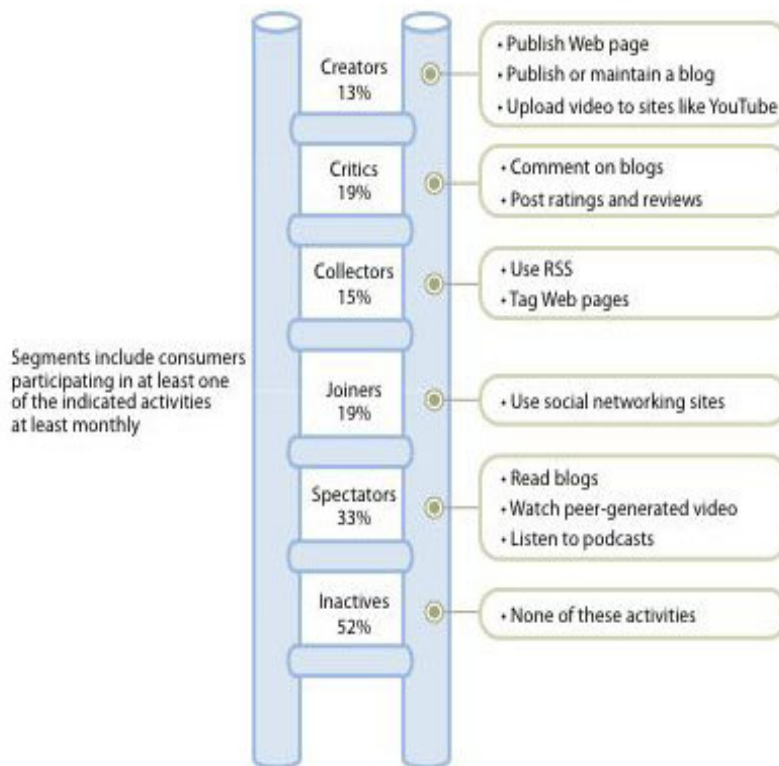
The final option for wireless security is using a filter that will only allow a pre-defined list of computers to connect to the network. This, used with WPA security will only allow the chosen computers to be able to connect to a network and will still require a password as an extra layer of security.

There are a lot of options to consider when deciding how you want your wireless access set up. Don't just try to make dramatic changes to your network's setup alone. Let M&H help you decide how much security you need and help you make sure that your company's data is as safe and secure as possible.

Inside the Numbers

Market research company Forrester recently released a report that looks at the US population's participation in the so-called "social media" phenomenon. This suggests that the majority of other participants in virtual worlds fit somewhere between Joiners and Critics, and half the US population is not engaged in media activity at all, and that is something that will change in time.

Figure 2 Social Technographics Groups Consumers By Activity In The Participation Ladder

Creators 13%
- Publish Web page
- Publish or maintain a blog
- Upload video to sites like YouTube

Critics 19%
- Comment on blogs
- Post ratings and reviews

Collectors 15%
- Use RSS
- Tag Web pages

Segments include consumers participating in at least one of the indicated activities at least monthly

Joiners 19%
- Use social networking sites

Spectators 33%
- Read blogs
- Watch peer-generated video
- Listen to podcasts

Inactives 52%
- None of these activities

Base: US adult online consumers

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## How Friendly is your Computer Environment

Tim Clarkin

With the warm summer months upon us, now is a great time to review the things you can do to keep your computers running as smoothly as possibly. Heat and dust can all contribute to major hardware problems if left unchecked.

One of the most common tricks manufacturers use to simulate the effects of aging is heat testing where the systems or parts are literally baked in order to duplicate the effects of years of use and gauge how performance is effected over time. Heat will put an enormous strain on the components of your workstation or server and prevent it from operating at its maximum efficiency or lifespan. When the environment around a PC or server isn't "friendly", the machine's cooling systems will be inefficient and the components will run much warmer than they should be.

The second major environmental threat to a computer's health is dust. Because computer cases generally have multiple fans for both taking in cool air and blowing out warm air, dust can get trapped inside a computer case and can get stuck on the components of the PC, as well as clogging the cooling fans and preventing them from operating as they need to in order to protect your PC. This can lead to issues with overheating. Dust can also cause issues with other components such as the hard disk, CD drives, floppy drives, and tape drives.
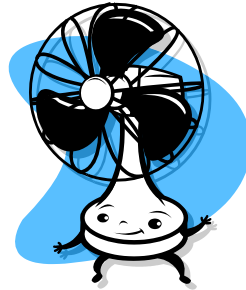
So what can you do? First thing is to ensure the computers are kept in a range between 68-74 degrees Fahrenheit at all times. The next thing you can control is to place the computer in a spot with room for air to be flowing around all sides of the case. Don't simply pack it into a corner to keep it out of the way, try to give the ma-

chine at least 6 inches clearance behind the machine, as well as above and on either side of the machine. This will help to make sure that the cooling fans have room to actually get heat away from the machine, rather than turning the machine into an expensive space heater. Avoid putting piles of stuff on top of the machine as this will also serve to trap more heat in the case. Finally, try to keep the area around PCs and workstations as free from dust as possible. Wiping the area around the PC and regular vacuuming can go a long way in preventing excess dust from collecting. M&H will often open up the case and clear out the PC with compressed air if we see excess dust during a visit as part of our Tech for a Day program. Call us at 1-800-9MH-TECH for help in making your computer's environment friendly.

"WE'RE ALL IMPRESSED WITH THE WORK YOU'VE DONE WITH CUSTOMER DATA, DALE, BUT WE'D LIKE SOMETHING A LITTLE MORE STATE-OF-THE-ART."