### INTERNET

To clear up issues relating to Al Gore's claim that he invented the Internet, he did not invent the Internet, but he was very instrumental as a Congressional Representative and a Senator from the late 1970s to the early 1990s to promote the concept and to introduce legislation that helped create the Internet.

The Internet began as an academic research project in 1969 and evolved into a global commercial network in the 1990s. The Internet is a decentralized network where no one entity owns the Internet nor controls who is allowed to connect to it. There are thousands of different networking organizations that operate their own networks and negotiate voluntary interconnection agreements to move information within and across their networks. As a result, the Internet is extremely resilient and self-healing should outages occur at most any point in the world. Today, the Internet it is used by billions of people around the world and has supplanted telephony, postal mail, and possibly talking as the most popular method of interacting with other people.

Access to the Internet is a key requirement for owning a computer as more and more of our everyday lives have become online based. With a plethora of user applications for email, social media, ecommerce, banking, data research, music, video, and books, the Internet puts unfathomable amounts of information within everyone's reach. Over the past 15 years, the Internet had drastically changed the way we live and will continue to do so exponentially in the years to come.

The Internet also exposes users to the black side of the Internet and the thousands of hackers continually looking for ways to exploit any personal information they can gather for their own gain or amusement. It is extremely critical that every computer or device used to access the Internet be utilizing some type of Internet security, whether it is part of the operation system like Apple OS X or IOS, or an application like McAfee or AVG.

<u>Tech Assist</u> has been involved with the Internet for the past 30 years, long before the general public had any idea there even was an Internet. This exposure has provided the experience and knowledge to understand the inner workings of the Internet and the skills to resolve problems that many of the current service technicians cannot.

## **HOTWIRE COMMUNICATIONS**

Pelican Preserve signed a new 10 year bulk services contract with Hotwire Communications to provide Internet, television, and telephone service to the community. Although not all residents were happy at the prospect of losing the familiarity they had developed with Comcast in the past, the move to Hotwire Communications will prove to have been a wise and fortuitus decision.

In the past, Tech Assist had worked with numerous residents to setup, repair, and/or customize their Xfinity or Century Link services and features to how they wanted them done, not the way the vendor had set them up. From the perspective of resident Internet related problems and issues, the switch to Hotwire will not be very different from Xfinity or Century Link.

# **VENDOR TERMINALS, ROUTERS, & WIRELESS ACCESS POINTS**

#### **Vendor Terminals:**

As Hotwire has installed a fiber optic network throughout Pelican Preserve, they use an Optical Network Terminal box to convert the Internet, television, and telephone services to/from the residents' devices. This is a similar device to the Xfinity embedded cable modem which connected the Internet service to the Xfinity embedded IP Router .

#### Router:

The primary function of a router is to connect multiple networks together and route network traffic between them. The Internet is built upon hundreds of thousand of interconnected routers that forward data traffic independently between source and destination computer devices. The home network routers today have numerous other features and functionality that greatly enhance their capabilities.

#### **Wireless Access Point:**

A wireless access point (WAP) is a hardware device on a local area network (LAN) that allows wireless capable devices and to connect through a wireless standard, including Wi-Fi or Bluetooth. The wireless access point features radio transmitters and antennae, which facilitate connectivity between the wireless devices to the local network and Internet. A wireless access point is also known as a hotspot.

### **HOTWIRE EERO PRO ROUTER**

The new eero Pro Router Xfinity Router includes a tri-band Wireless Access Point and Wireless Mesh technology to maximize the connectivity and coverage capabilities of the WiFi service in every resident's home. Residents will discover the new eero Pro Router Xfinity Router far exceeds the power and features of either the Xfinity or Century Link Routers.

<u>Tech Assist</u> recommends using the new eero Pro Router for your network broadband connection rather than using your own Router/WiFi device. Additional eero Pro Routers can be purchased or leased through Hotwire to expand the WiFi coverage area for larger homes within Pelican Preserve.

#### INTERNET BROWSERS:

An Internet Browser is an application used to connect and access websites on the Internet. All browsers can be configured to start-up with one or more connections to Internet websites.

1. Microsoft Edge 5. Chromium 9. Rambox

Google Chrome
Mozilla Firefox
Opera
SeaMonkey Composer
Host Browser

4. Apple Safari 8. Focos 12. Iron

NOTE: Microsoft Internet Explorer browser app is obsolete and will be rejected by most websites as it no longer has the appropriate security for safe connections.

### INTERNET SECURITY:

Windows was designed as an "open" operating systems to allow private developers to create device drivers, utilities, and applications to run on most every Windows operating system. Unlike Apple OS X and IOS, which are "closed" operating systems and very difficult for hackers to attack, Microsoft is continually battling with hackers who exploit Windows "open" operating systems with a variety of intrusive software that can be simply mischievous to totally devastating.

The newer Windows releases have bundled "Windows Defender" as part of the operating system to provide some level of Internet Security readily available on the computer. Windows Defender works and provides basic antivirus protection, but it rarely makes the Top Ten list of best Internet Security packages available from private vendors.

Listed below are several recent lists from PC Magazine for the best Antivirus Protection packages (Paid & Free) available.

# PC Magazine - Best Antivirus Protection September 2021 (\$20 - \$40)

- 1. McAfee AntiVirus Plus
- 2. Norton LifeLock
- 3. Kaspersky Anti-Virus
- 4. Bitdefender Antivirus Plus
- 5. Webroot SecureAnywhere AntiVirus
- 6. ESET NOD32 Antivirus
- 7. Malwarebytes
- 8. SOPHOS Home Premium
- 9. Trend Micro Antivirus + Security
- 10. F-Secure Anti-Virus
- 11. Cylance Smart Antivirus
- 12. G Data Antovirus
- 13. Emisoft Anto-Malware

# PC Magazine - Best Antivirus Protection September 2021 (Free)

- 1. Avast Free Antivirus
- 2. Kaspersky Free
- 3. AVG AntiVirus Free
- 4. Bitdefender Antivirus Free Edition
- 5. Sophos Home
- 6. Avira Antivirus
- 7. Microsoft Defender
- 8. Check Point ZoneAlarm Free Antivirus+
- 9. Adaware Antivirus Free
- 10. Qihoo 260 Total Security

<u>Tech Assist</u> now recommends Microsoft Windows Defender as both the :free" AntiVirus and "paid" System Security package for Windows 10. Microsoft Windows Defender is continually improving and expanding the security capabilities and cracked the "Top 10" Anti-Virus surveys in 2020. Although it is not as good as some of the "paid" system security applications, Microsoft Windows Defender is integrated into the Windows 10 operating system and is automatically activated "right out of the box" when a new computer is turned on.

The Windows 10 integration key advantage for using Microsoft Windows Defender as it coexists with the operating system as opposed to all the other Anti-Virus or System Security packages that must be installed "on top" of the Windows 10 operating system. This is especially noticeable when a computer is first powered on and does not take the typical 10-15 minutes for the other Anti-Virus or System Security packages to run all their system "checks" before relinquishing control back to the user