

## WINDOWS BASED PERSONAL COMPUTERS

There are over one (1) billion Windows based computers worldwide, approximately 90% of all computers currently operating. Owning and using a computer has become one of life's necessities as more and more businesses are migrating their customer interaction to computer and/or Internet based applications.

**Computer hardware has become more reliable over the years, so the majority of user issues tend to be more software related. [Tech Assist](#) will analyze your issues and/or problems fairly quickly to determine if it is hardware or software related, then provide recommendations as to how to proceed fixing your Windows based computer.**

### Desktop Computers”

Desktop computers have been around since their humble beginnings in the basement and garage workshops. Today, this type of computer is primarily modularized, built from standardized components whenever feasible to keep the cost as low as possible. As a result, Desktop computer hardware is fairly easy to fix by isolating and replacing the failing component, thus making hardware repair more affordable.

### Laptop/Notebook Computers:

Laptop/Notebook computers are becoming increasingly more compact and difficult to repair or update. Memory upgrades are usually the only hardware change that can be made without opening up the case. Sometimes the hard drive is also accessible, but most new laptops require opening the case to access. The access to internal components of a laptop varies by manufacturer as well as by specific model. Before attempting to repair a laptop, Gary will check the manufacturer and model repair guides to see if the repair is feasible or not.

### All-In-One (AIO) Desktop Computers:

All-In-One (AIO) computers eliminate the standalone desktop unit by incorporating all the computer components within an expanded monitor display case. As a result, AIO desktops tend to be built more compact and difficult to repair or update, similar to laptops. As with laptops, Gary will check the manufacturer and model repair guides to see if the repair is feasible or not.

### PC Magazine Readers' Choice Awards 2020:

These rankings should provide information with regards to the reliability of your current computer as well as insight to your next computer acquisition.

Desktops (Home Use)	Laptops (Home Use)	All-In-One Desktops (Overall)
Apple	Apple	Apple
Alienware	Microsoft	Dell
ASUS	ASUS	HP
Dell	Acer	Lenovo
Lenovo	Dell	
Cyberpower	HP	
Acer	Lenovo	
HP		
“Self Built”		

## **Microsoft Windows**

Windows is the operating system used by the majority of all personal computers worldwide. See the Windows OS section in the Software tab for additional information regarding the Windows operating systems.

## **Windows 10 Upgrades**

Computers users running the Windows 7, Windows 8, or Windows and 8.1 release are faced with the dilemma of upgrading or buying a new computer. See the Windows OS section in the Software tab for additional information regarding the Windows 10 upgrades.

## **Your Existing Windows 10 Computer Runs Slow**

Most residents start thinking about a new computer when their old computer starts running slow or they experience the new “spinning rainbow” system busy indicator when trying to do something. This may be an indication the computer can no longer handle the demands of Windows 10, but it is more likely there are too many applications running for the computer to handle properly.

**Tech Assist has evaluated numerous Windows 10 computers and found over time, the systems may acquire an excessive number of extraneous questionable processes running. By applying a set of system checks and parameter changes, the majority of slow running computers can be restored to a level of performance similar to when they were new.**

## **New Windows PC Conversion**

The components in the computer are the primary factor for getting a new computer. A resident could have a 2 year old computer, but if the processor, memory, or hard drive are deficient, so the computer will never run Windows 10 efficiently. Whereas, a 6 or 7 year old computer with a high powered processor, lots of memory and a better hard drive could last another 3-4 years before it would need to be replaced.

**Tech Assist has also done numerous conversions from an old computer to a new computer. The time and complexity required for this type of conversion is primarily dependent on physical access to the hard drive on both the old and the new computers.**

**The first (and most difficult) task is to copy all the user data files and portions of the system files to a temporary folder the new computer hard drive. Once the data is on the new computer and running Windows 10, the user data files can be moved to the appropriate user folders.**