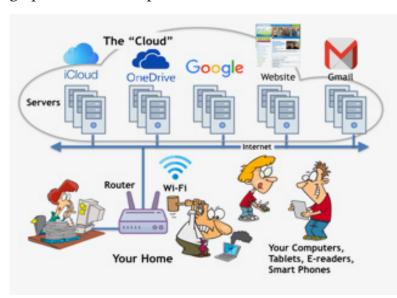
COMPUTER GURU

By Don Benjamin

Cloud Services

One of the questions folks often ask when they visit the Technology Lab is, "What's the cloud?" So, I thought it was time to talk about the cloud and offer some reasons to use it. I drew the nifty graphic below to help.



How your computer gear connects to the "cloud." corner.

First, "Why the Cloud?" It's an unfortunate name because it conjures up images of an ethereal network floating overhead. But it actually refers to the gazillion computers, servers, smart phones, tablets, etc., interconnected via the internet. (In that sense, your computer and mobile devices are also part of "the cloud".)

Now, unlike the traditional ("dial") telephone system, which connects two phones over a defined path of wires, the information you send over the internet is chopped into "packets" of data that are commingled with packets from other computers over the internet and reassembled at the destination. The email message you send to your son in Denver may be sliced into 10 pieces in Bayonne, shipped over the internet via 5 different paths, and reconstructed by computers in nearby Boulder—all within fractions of a second.

The YouTube video you're watching on how to replace the shock absorbers on your Yugo comprises thousands of data "packets" that flow from the YouTube

servers through the internet over many paths to your service



Proud Yugo owner.

provider's (Verizon or Comcast) network and into your home.

Therefore, we can think of the internet as a "cloud," where stuff goes in here and comes out there but doesn't follow an identifiable path. In fact, it can follow many paths simultaneously.

When you Google a term, send an email, or open the princetonsenior.org website, you're using the internet to connect your personal computer to corporate "servers"—which are simply huge computers in giant buildings—in "the cloud." These servers could be anywhere in the world. Apple's iCloud could be in California or Great Britain; YouTube and

Gmail servers could be in Seattle, Paris, and Tokyo; PSRC's web server might be in Princeton or Bayonne or Chicago. It doesn't matter because the internet is global, and it transports information at the speed of light.

So far, I've referred to servers in the cloud as sources of information—data that others have made available for you to download. But you can also use cloud servers as repositories to back up the information on your computer. Apple's iCloud, Microsoft's OneDrive, Google's Drive, and Dropbox are excellent cloud-based backup services (I use iCloud and OneDrive). They're seamless, reliable, and inexpensive.

If you want to know more about cloud services, stop by the Technology Lab on Tuesdays from 1:00 to 4:00 p.m., Wednesdays from 1:30 to 4:00 p.m., or Fridays from 10:00 a.m. until noon.