Windows SIG

The Cloud

031015

Software Update

Glary Utilities

- In previous sessions I have advocated running Glary Utilities in companion with CCleaner
- I have become disenchanted with the app and now recommend uninstalling the app
- There is nothing wrong with the app per se, the issues are:
  - ✓ The app persistently prompts a User to update various apps which is not recommended or necessary and can lead to malware
  - ✓ There are numerous places in the installation process and even after installation that include links that produce unintended consequences
- If you have installed Gary Utilities, the recommendation is that you uninstall same with Revo
- If you do not have Revo on your system, it is available, free, at www.Ninite.com under the header "Utilities"

PrivaZar

- PrivaZar is the most comprehensive free "cleaning" tool that I have tried and recommend that you give the free version a try
- Here's the link http://privazer.com/download.php#.VPxrN_nF98F
- PrivaZar is optimized for SSD drives
- There are no unintended consequences from installing or operating PrivaZar
- After installation you are prompted for various setup and clean options
- You can schedule and automate system cleaning
- The 1st time you run the app it takes a considerable time to run (on my machine, 16 GBS, SSD +1 TBD, almost an hour)
- Subsequent scans require considerably less time
- HEADS UP – if you employ AVG antivirus, it can flag PrivaZar as malware, which it is not (updating AVG prior to installation of PrivaZar resolves the problem)

Autoruns

- Autoruns is a free Microsoft app that is a vast improvement over the "Start Up" tab in msconfig
- Autoruns can be downloaded from this link https://technet.microsoft.com/en-us/sysinternals/bb963902.aspx
- Tip… prior to booting the app, right click on the Autoruns icon and select "run as administrator" , if you intend to make any changes
- Autoruns is for both beginners and advanced Users and it is recommended that you begin to explore it's many features
- Two of the primary features are:
    1. You can see, and get an explanation of everything that is running on your system and if an item is not wanted or needed, you can simply uncheck or uninstall the app, and
    2. You can check questionable items running on your system with "Virus Total" (more than 50 antivirus checks) by simply right clicking on an item
- There is a very good Autoruns tutorial at the following link: http://www.howtogeek.com/school/sysinternals-pro/lesson6/all/

The Cloud

What is the Cloud?

- "The Cloud" is simply one of those trendy tech terms that defines products, services or storage that are accessible via the Internet

- So, if you are using a social media site like Facebook, you are using the cloud

- Or, if you employ webmail like Gmail, Outlook or www.Suddenlink.net you are actually accessing a cloud application

- Or, for example, Adobe has moved its creative services software to the cloud. You can no longer buy the Creative Suite (Photoshop, InDesign, etc.) on a disk. Instead, you pay a monthly subscription fee to use each individual service. It's now called the "Adobe Creative Cloud".

- Or, if you use "bill pay" that is offered by most banks, you are using the "cloud"

The Cloud is Not…Is…& Are

- The "cloud" is not, some surreal, abstract location in the stratosphere!

- The cloud is one or more servers that offer a User, Internet based access to products, services or data storage, and

- There are "public" and "private" clouds

There Are Numerous Potential Benefits

- **Lower Computer Costs**: Users do not need as much computer power for web based apps
- **Improved Performance**: Users will have fewer apps that hog computer memory, resulting in increased performance
- **Reduced Software Costs**: e.g. Google Docs, Outlook, Office and OneNote are free, cloud apps
- **Updates & Maintenance**: no longer a hassle, handled by the provider
- **Access**: files can be accessed from anywhere in the world with any appliance and an Internet connection
- **Storage**: modular unlimited storage capability
- **Backup & Syncing**: expanded backup capability and automatic synching
- **Collaboration**: flexibility in sharing documents with others
- **Encryption**: much of your data is encrypted

Who Are The Major Cloud Providers?

Vendor	Product	Free Storage	Additional Options	Website
Amazon	Amazon Cloud Drive	5 GBs	50GBs - $25/year	https://www.amazon.com/clouddrive/learnmore
Apple	iCloud	5 GBs	20GBs - .99/month	https://support.apple.com/en-us/HT201318
Google	Google Drive	15 GBS	100 GBs – 1.99/month	https://www.google.com/drive/
Microsoft	Microsoft OneDrive	15 GBs	100 GBs 1.99/month	https://login.live.com/login.srf?wa=wsignin1.0&rpsnv=12&ct=1425321549&rver=6.4.6456.0&wp=MBI_SSL_SHARED&wreply=https:%2F%2Fonedrive.live.com%2F%3Flc%3D1033%26mkt%3Den-US&lc=1033&id=250206&cbcxt=sky&mkt=en-US&cbcxt=sky

What are The Risks of Cloud Computing?

- Automatic updates is a two sided coin, it reduces the hassle but it also means that "change" is out of the User control
- Lack of an Internet connection means your data is not accessible unless you have synced with the desktop
- System management is out of User control and transferred to a 3rd party, and
- Security, which is a three pronged exposure
  - ✓ User password security
  - ✓ Worldwide cybercriminals attempting to break into systems
  - ✓ Insider breaches, think Edward Snowden, some feel that the most serious breaches will be due to insider threats and privileged user access?

What to do About the Cloud?

- The cloud is here to stay!
- There are those that believe that in the future, virtually all computing will be done in the cloud and none on the desktop
- It is important that you start now, to grow your skills with the cloud
- Here's some guidance:
  - ✓ Only employ "major, free" cloud vendors (the big four), all employ security in depth
  - ✓ Check to verify that the vendor encrypts your data?
  - ✓ Start using "two level" authentication, if offered and password management software
  - ✓ Start small to build your skills, e.g. only put you pictures in the cloud and share cloud folders with a trusted family member, or e.g. start paying your bills online
  - ✓ Start using cloud services when you travel

Private Clouds May Be the Best Option?

- *A "private cloud"* is distinguished from a public cloud to describe a cloud platform that is initiated and controlled by a User, that sits behind a User firewall

- A private cloud is designed to offer similar features and benefits of public cloud systems, but removes a number of objections including control and security

- A "private cloud" is possible because it is a NAS (network attached storage)
  - ✓ NAS drives that are attached a router, via an Ethernet connection rather than USB. Virtually all contemporary NAS drives have a private cloud capability
  - ✓ NAS drives are considered to be safer than traditional USB connected hard drives
  - ✓ NAS drives also have a USB port(s) for printers or additional capacity

Why a Private Cloud?

- User control

- Expanded storage, at less cost

- Probably less hacking exposure

- Better control over your data

- Syncs multiple devices

- User is responsible for security

NAS Comes In All Sizes

One TB Disk NAS

"Diskless" Two Bay

Cost of NAS Appliances With Private Cloud

- A single two terabyte Network Attached Storage (NAS) will cost approximately $150

- A "diskless" two disk capable NAS will cost between $175 and $300 (multi-disk NAS systems typically provide more features and apps than single disk systems)

Where to Purchase a Cloud Enabled Router

- Cloud Enabled Routers
  - ✓ Amazon.com – http://www.amazon.com/s/ref=nb_sb_noss?url=search-alias%3Daps&field-keywords=cloud+enabled+router&rh=i%3Aaps%2Ck%3Acloud+enabled+router
  - ✓ Buy.com - http://www.rakuten.com/sr/searchresults.aspx?qu=cloud+enabled+routers
  - ✓ Newegg.com - http://www.newegg.com/Product/ProductList.aspx?Submit=ENE&DEPA=0&Order=BESTMATCH&Description=cloud+enabled+router&N=-1&isNodeId=1

- Network Attached Systems (NAS)
  - ✓ Amazon.com - http://www.amazon.com/s/ref=nb_sb_noss?url=search-alias%3Daps&field-keywords=cloud+enabled+NAS&rh=i%3Aaps%2Ck%3Acloud+enabled+NAS
  - ✓ Buy.com - http://www.rakuten.com/sr/searchresults.aspx?qu=cloud+nas
  - ✓ Newegg - http://www.newegg.com/Product/ProductList.aspx?Submit=ENE&DEPA=0&Order=BESTMATCH&Description=nas+storage&N=-1&isNodeId=1