

Technology Report Semester 1 2019-2020



Sustainability / Repairability

Did you know that all models of Chromebooks managed in the district are fully repairable and all are repaired in-house?

Screens, batteries, logic board, wireless card, keyboards are all serviced/repaired and or replaced. This has extended the life of our Chromebooks to 4-5 years.

** 1800 Chromebooks in Active Use

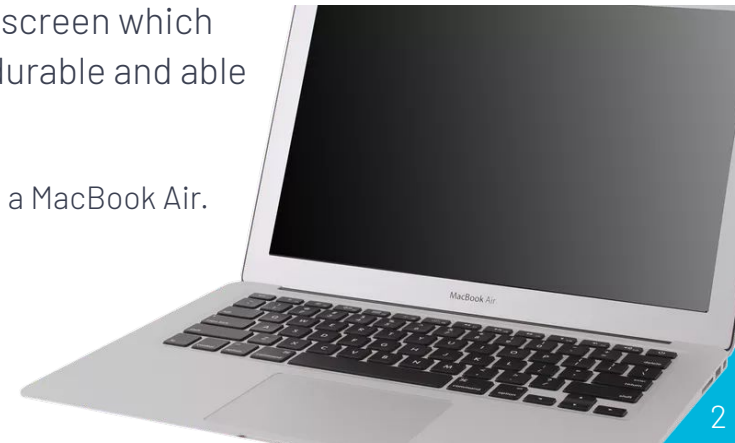
** 210 MacBook Airs / Admin / Staff

** 600 iPads

All Apple computers are also repaired in house.

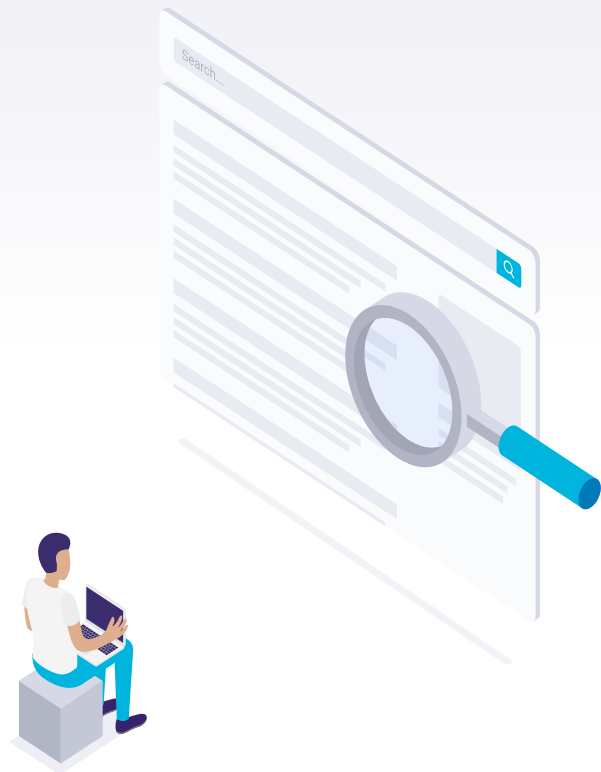
The MacBook Air 2015 and 2017 model has replaceable hard drive, replaceable battery and replaceable screen which makes the model extra durable and able to be serviced in house.

All Staff currently are issued a MacBook Air.



► Inventory Update

- ▶ [Inventory List – Google Sheet](#)
- ▶ Thx To Nitzy Bull
- ▶ Work in Progress Expanded to keep track of iPads, Wireless Access Points, Projectors, chromebooks, laptops and more.



New iPads – 6th / 7th Generation

- ▶ All iPads have all been replaced with Generation 6/7th iPad for education model.
- ▶ 3 Major Rollout of iPads since the original iPad from 2010
- ▶ Mainly replaces the iPad Mini from 2013-2014

The machines are full size 10.2 inches unlike the older iPad minis and are working as intended with our hosted profile manager gcsdchat.org.



Chromebook – Retiring of ARM .

Samsung CE500X12

The Samsung Model 2

Chromebooks are no longer supported by Google. They were used for between 4 and 5 school years. Great

[Google Retirement Dates](#)

No longer gets updates to Google Chrome.

Devices can be used for rest of school year past Retirement Date. (IAR / NWEA testing using devices already past date)



Replacing with Samsung Generation 4

All new Samsung Chromebooks use Intel CPU's more like a traditional computer.

Network Update GHS

- ▶ The new fiber connection at the HS is now active and live. This is a full 1000mbps up/down connection that will the HS will fully utilize beginning this summer. Currently all schools in the district share a single connection out of the MS. The HS will operate on its own fiber connection. This essentially doubles the working bandwidth of the school and should us ahead of the curve with Internet bandwidth access and network speed.



End of Support Dates

Windows 7 / Server 2008

Windows 7 has been retired and along with this comes the retirement of Server 2008 and Server 2008R2. (Skyward used to Run on Server 2008)

All Windows based workstations have been upgraded to Windows 10, including 4 HS teachers, HS Lunch Terminals, MS tech lab and HS business Lab.

I setup and manage all servers in the district. The Microsoft based server's now run Server 2012 or higher. The next Windows upgrade cycle to be concerned with is Oct 23, 2023. This is the End of Life date for Server 2012 and Server 2012 R2.

Geneseoschoollibrary.org & [Skyward](#) run on Server 2012.
(Located in Basement of Unit Office)



Security and Ransomware

The biggest attack vector on Public schools is crypto viruses also called Ransomware.

For example [Rockford Public Schools](#)

A Ransomware attack is where an outside hacker or group gains unauthorized access to your system IT infrastructure and then encrypts all the files and systems it can with a password. Here they leave a ransom note asking for a certain amount of money to give you this password so you can access your files.

(<https://www.us-cert.gov/Ransomware>)

(<https://www.malwarebytes.com/ransomware/>)



Reducing our Risk

To reduce our risk, I do pretty extensive monitoring of our WAN network connection and our firewall.

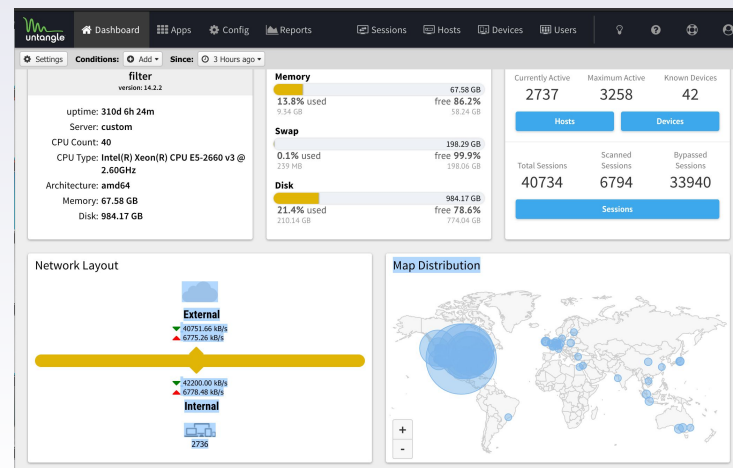
I have reduced the number of access points into our network and review the network logs multiple times a week.

I operate on a zero-tolerance basis now and any port scans or external scans on our network result in an IP ban.

Our Skyward system is now backed up physically to large capacity Blue Ray data disks in addition to other digital mediums. These are physical backups that cannot be damaged or held for ransom via encryption.

Our main email system is Google based and is not at risk of Ransomware.

[Network Security Appliance 1 of 2.](#)



THANKS!

Any questions?

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