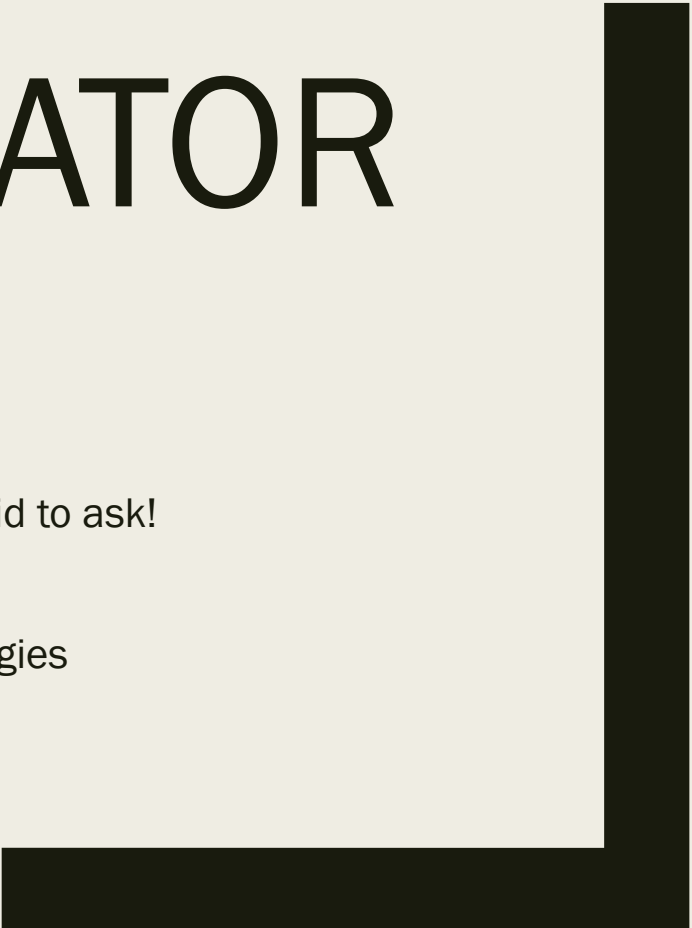




TECH COORDINATOR MEETING

Everything (almost) you've wanted to know but were afraid to ask!

Steve Nasdeo
Director of Diocesan and Catholic Schools Technologies



Agenda Items

- Content filtering
 - *What is it and what to do if you get a file*
 - *Document, document, document*
- Bark app
- DOJ Legal Hold
 - *New domains need to set it up*
 - *This is a requirement for all non-cdeducation.org domains*
- Bandwidth monitoring
 - *Weekly reports*
 - *Individual schools can request a report*

Content Filtering

- What is it?
 - *Web content filtering is the practice of blocking access to web content that may be deemed offensive, inappropriate, or even dangerous.*
- Why do we have it?
 - *Children Internet Protect Act (CIPA) requires "a technology protection measure with respect to any of its computers with Internet access that protects against access through such computers to visual depictions that are obscene, child pornography, or harmful to minors"¹ and must be deployed "during any use of such computers by minors"²*

1. TITLE XVII—CHILDREN'S INTERNET PROTECTION ACT, Section 1703, (b), (1)

2. TITLE XVII—CHILDREN'S INTERNET PROTECTION ACT, Subtitle A—Federal Funding for Educational Institution Computers, Section 3601, (A)(i), (ii)

How does it know what to block?

- Sites schools have asked to be blocked
- Sites are defined by Categories
 - [Forcepoint Master Database](#)
 - *We are only reporting two categories to principals:*
 - Adult Content
 - Sex
 - *There are a total of 90 different categories*
 - 54 different school blocked websites
 - 36 blocked categories

Categories that get blocked

Abortion

Adult_Content

Alcohol_and_Tobacco

Alternative_Journals

Blogs_and_Personal_Sites

Bot_Networks

Compromised_Websites

Elevated_Exposure

Gambling

Games

Gay_or_Lesbian_or_Bisexual_Interest

Hacking

Illegal_or_Questionable

Internet_Auctions

Intolerance

Lingerie_and_Swimsuit

Malicious_Web_Sites

Marijuana

Newly_Registered_Websites/SITE_REPUTATION_HARMFUL

Non_Traditional_Religions

override-block

Parked_Domain

Pay_to_Surf

Peer_to_Peer_File_Sharing

Personals_and_Dating

Phishing_and_Other_Frauds

Potentially_Unwanted_Software

Proxy_Avoidance

Sex

Sport_Hunting_and_Gun_Clubs

Unauthorized_Mobile_Marketplaces

Uncategorized/SITE_REPUTATION_HARMFUL

Violence

Weapons

Web_and_Email_Spam

What to do if you get an email from me

- Try to determine who tried to access the sites on your list
- If you can figure out who tried to access the site(s), consequences (for now) are up to the principal
- How to possibly determine what device the person used:
 - *Determine the Media Access Control (MAC) Address of the device*
 - The MAC address is a unique number assigned by the manufacturer of the Network Interface controller (NIC) inside of the computer, phone or tablet
 - *To possibly find the MAC address, access the DHCP file on your network*
 - DHCP stands for dynamic host control protocol
 - *It assigns IP addresses to devices when the device connects to your network*
 - *Typically, the DHCP file will have the IP address and the MAC address next to each other along with the device name (if the device is named)*
 - If you are using GoGuardian (or some other type of MDM application):
 - *When you registered the device, it should capture the MAC address*
 - *For those schools who contracted with META to support their DHCP networks, open a ticket with them, giving them the time and the source IP address in the file.*
 - If you have more than 1 source IP address, you will need all of the information (times and source IP addresses) when you open a ticket.

School DHCP pools managed by META

school	network	note
All Saints Academy	10.2.32.0/255.255.254.0	lan
All Saints Academy	172.16.32.0/255.255.255.0	teachers
All Saints Academy	192.168.32.0/255.255.255.0	BYOD/guest
Bishop Fenwick-St. Nicholas	10.56.16.0/255.255.252.0	lan
Bishop Hartley	10.2.12.0/255.255.255.0	security cameras
Bishop Watterson	10.2.16.0/255.255.240.0	lan
Bishop Watterson	192.168.8.0/255.255.255.0	admin
Bishop Watterson	10.114.248.0/255.255.254.0	teachers
Bishop Watterson	10.114.240.0/255.255.248.0	student
Bishop Watterson	10.114.250.0/255.255.254.0	BYOD/guest
Blessed Sacrament	192.168.10.0/255.255.254.0	lan
Blessed Sacrament	192.168.12.0/255.255.254.0	additional lan
Fisher Catholic	10.108.249.0/255.255.255.0	BYOD/guest
Fisher Catholic	192.168.20.0/255.255.252.0	BYOD/guest
Holy Spirit	10.2.76.0/255.255.254.0	BYOD/guest
Holy Trinity	10.27.9.0/255.255.255.0	lan
Immaculate Conception (Dennison)	10.54.4.0/255.255.252.0	lan
St. Andrew	10.2.81.0/255.255.255.0	BYOD/guest
St. Anthony	192.168.27.0/255.255.255.0	BYOD/guest
St. Bernadette	192.168.4.0/255.255.255.0	BYOD/guest
St. Catharine	192.168.28.0/255.255.255.0	BYOD/guest
St. James the Less	10.2.13.0/255.255.255.0	lan
St. James the Less	10.108.232.0/255.255.252.0	student
St. James the Less	10.2.86.0/255.255.255.0	BYOD/guest

school	network	note
St. Mary (Lancaster)	192.168.2.0/255.255.255.0	lan
St. Mary (Lancaster)	192.168.3.0/255.255.255.0	additional lan
St. Mary (Lancaster)	10.108.247.0/255.255.255.0	BYOD/guest
St. Mary (Marion)	10.2.43.0/255.255.255.0	lan
St. Mary Magdalene	10.2.58.0/255.255.254.0	main hall
St. Mary Magdalene	10.2.39.0/255.255.255.0	raymond hall
St. Mary Magdalene	10.2.79.0/255.255.255.0	preschool
St. Michael	10.2.10.0/255.255.254.0	BYOD/guest
St. Michael	10.2.75.0/255.255.255.0	speakers
St. Rose	10.6.254.0/255.255.255.0	lan
St. Timothy	10.2.90.0/255.255.254.0	lan
St. Vincent de Paul	10.2.80.0/255.255.255.0	BYOD/guest
Sts. Peter and Paul	10.17.1.0/255.255.255.0	lan
Sts. Peter and Paul	10.17.2.0/255.255.254.0	student
Trinity	10.2.26.0/255.255.255.0	lan
Trinity	10.2.82.0/255.255.254.0	additional lan
Trinity	10.2.78.0/255.255.255.0	BYOD/guest
Tuscarawas Central Catholic ES	10.54.0.0/255.255.252.0	lan
Tuscarawas Central Catholic ES	192.168.36.0/255.255.255.0	BYOD/guest
Tuscarawas Central Catholic HS	10.54.8.0/255.255.252.0	lan
Tuscarawas Central Catholic HS	10.106.4.0/255.255.254.0	private
Tuscarawas Central Catholic HS	10.106.2.0/255.255.254.0	BYOD/guest

Information in the file

time	school	profile	category	source	destination	host
2020-09-23.00:00:02	BishopHartleyHS	BishopHartleyHS	Potentially_Unwanted_Software	10.2.111.220	183.131.7.100	sdk.open.phone.igexin.com
2020-09-23.00:00:07	StMatthewGahanna	StMatthewGahanna	Games	10.2.69.231	151.139.241.4	onlinecheck.wildtangent.com
2020-09-23.00:00:07	StMatthewGahanna	StMatthewGahanna	Games	10.2.69.231	151.139.241.4	onlinecheck.wildtangent.com
2020-09-23.00:00:12	BishopFlaget	BishopFlaget	Games	10.104.0.72	151.139.241.4	onlinecheck.wildtangent.com
2020-09-23.00:00:12	BishopFlaget	BishopFlaget	Games	10.104.0.72	151.139.241.4	onlinecheck.wildtangent.com

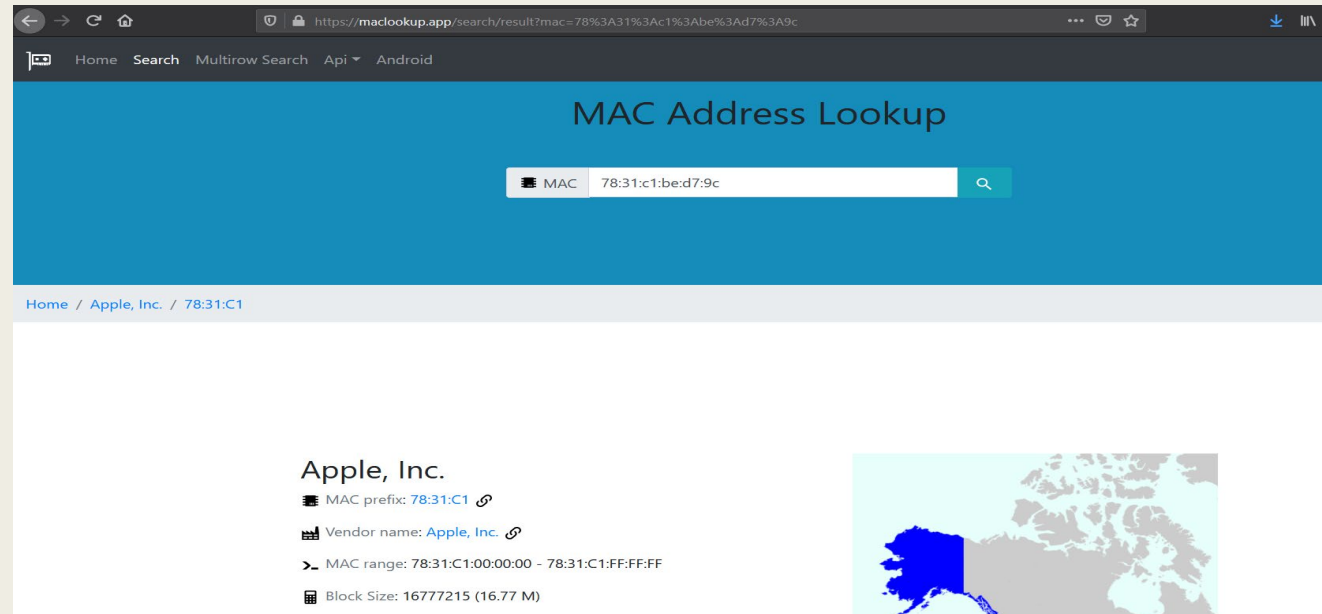
Time – is shown as a 24 hour clock

Category – either the school's block list or from the Forcepoint database

Source – the IP address of the device that attempted to access the website

Got the MAC address – Now what?

- Once you have found out the MAC address, you're probably thinking so what the heck is this and how does it help me?
 - Take the MAC address and put it into this website - <https://maclookup.app/>
 - This website will tell you who the manufacturer of the Network Interface Controller (NIC) of the device
 - For example, you might find that the MAC address for a device is 78:31:c1:be:d7:9c
 - According to the above URL, that MAC address is assigned to an Apple device



The screenshot shows a web browser window with the URL <https://maclookup.app/search/result?mac=78%3A31%3Ac1%3Abe%3Ad7%3A9c>. The page title is "MAC Address Lookup". A search bar contains the MAC address "78:31:c1:be:d7:9c". Below the search bar, the breadcrumb "Home / Apple, Inc. / 78:31:C1" is visible. The main content area displays the following information:

- Apple, Inc.
- MAC prefix: 78:31:C1
- Vendor name: Apple, Inc.
- MAC range: 78:31:C1:00:00:00 - 78:31:C1:FF:FF:FF
- Block Size: 16777215 (16.77 M)

On the right side of the page, there is a map of the United States with the state of Alaska highlighted in blue.


Now what.....continued

- For example, you might find that the MAC address for a device is 78:31:c1:be:d7:9c
- According to the above URL, that MAC address is assigned to an Apple device

Home / [Apple, Inc.](#) / 78:31:C1

Apple, Inc.

- MAC prefix: [78:31:C1](#)
- Vendor name: [Apple, Inc.](#)
- MAC range: 78:31:C1:00:00:00 - 78:31:C1:FF:FF:FF
- Block Size: 16777215 (16.77 M)
- Address:
 - 1 Infinite Loop
 - Cupertino CA 95014
 - US.
- Type MA-L
 - Mac Address Block Large (previously named OUI). Number of address 2^{24} (~16 Million)
- Initial registration: 13 December 2013
- Last updated: 17 November 2015



Big deal, now how do I find that device?

- Now comes the hard part, finding the device and who was on it at the time of the infraction
- One way to find the device is to initiate what I like to call the **SCREAM TEST**
 - *Basically, once you find the MAC address, open a ticket with META to block that device from accessing your internet.*
 - *Once the person who owns, or is trying to use, the device complains that they can't get to the internet, you have just discovered the device and the user!*
- If you use GoGuardian or some other MDM
 - *When you register the device it should have the MAC address loaded as well*
- Going forward
 - *Recommend that you name your devices as the name should show up in the DHCP file next to the IP address*
 - This is also a good business practice for asset inventory

Adam/ Steve,

As per the attached link, Bark is free for schools.

<https://help.bark.us/en/articles/2740925-faqs-bark-for-schools#:~:text=What%20is%20Bark%20for%20Schools,Chrome%2C%20Chromebook%20and%20DNS%20filter.>

Bark sends me weekly a Bulletin on the activities of all my students.

Any Critical issues are sent to me immediately.

The best part is that I don't need to get into all the reports if I don't want to. All I need to do is click on "issues found" and it takes me directly to the next screen and allows me to click on what I want to review. EASY!



THIS WEEK ON BARK

225

ACTIVITIES ANALYZED

3

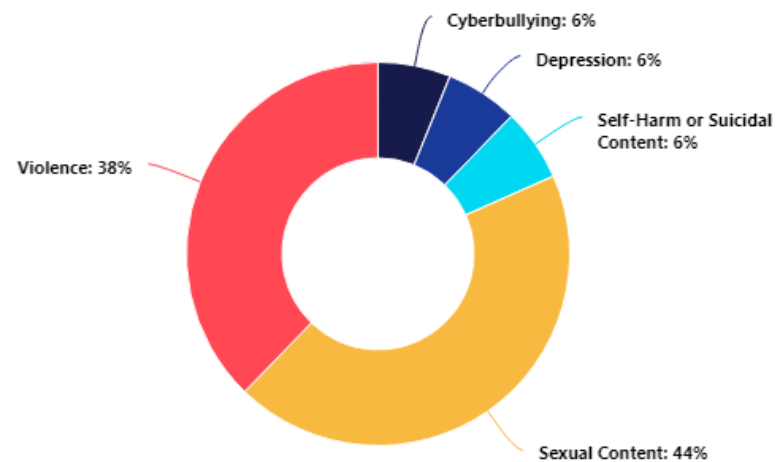
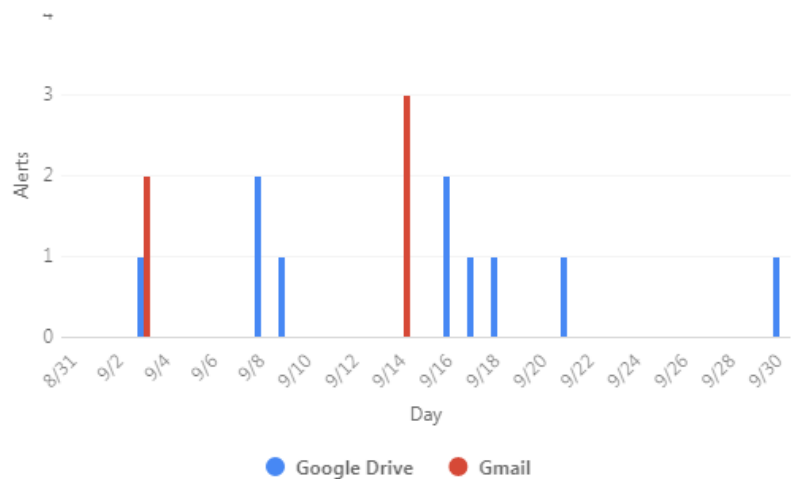
ISSUES FOUND

Type	Total Issues
Sexual Content	1
Depression	1
Violence	1
Self-Harm or Suicidal Content	1

Bark is monitoring 78 students across 7 organizational units.

Reports

2020-09-01 - 2020-09-30 Filter



The report allows you to drill down into all your students and organizations.

Search for group...

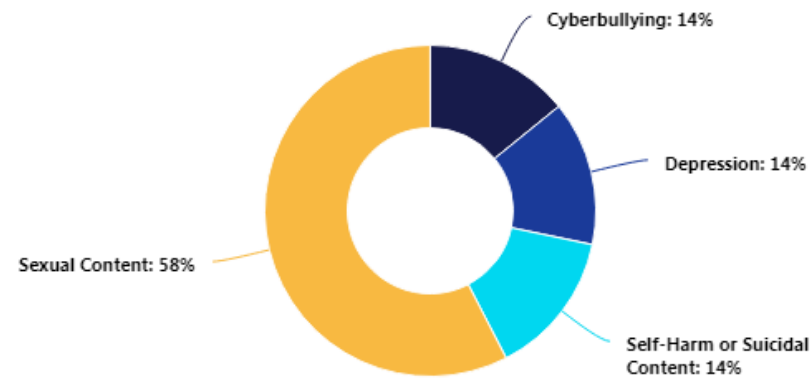
Group	Total Alerts
/Students/2022 Graduation Year	13
/Students/2024 Graduation Year	10
/Students/2025 Graduation Year	6
/Students/2023 Graduation Year	5
/Students/2021 Graduation Year	3
/Students/2026 Graduation Year	1

The report allows you to drill down into all your students and organizations.

6
Issues Found

Student	Total Issues
Nicholas Emmert	5
Mary Claire Williams	1

Type	Total Issues
Sexual Content	4
Cyberbullying	1
Depression	1
Self-Harm or Suicidal Content	1



The report allows you review by student



Nicholas

/Students/2022 Graduation Year

nemmert@htspacers.org September 18, 2020 at 2:50pm

Sexual Content

Review later >



Nicholas

/Students/2022 Graduation Year

nemmert@htspacers.org September 9, 2020 at 11:21am

Sexual Content

Review later >



Nicholas

/Students/2022 Graduation Year

nemmert@htspacers.org September 8, 2020 at 11:31am

Sexual Content

Review later >



Nicholas

/Students/2022 Graduation Year

nemmert@htspacers.org September 3, 2020 at 11:54am

Sexual Content

Review later >

www.dispatch.com • now ^

The Columbus Dispatch
COVID-19: Ohio State gets \$5M gra
statewide cases jump

The program allows you to select which student or event you want to review.



Nicholas Emmert

nemmert@htspacers.org

/Students/2022 Graduation Year

Saved a Photo on September 3, 2020 at 11:54am

Sexual Content

Reviewed by Bill Noll on September 4, 2020 at 3:33pm

Share with Reviewer

Share with Parents

Review later



boob swish - running fat man |
Meme Generator

After clicking on the student's name, it takes you to the actual website or report that the student accessed or saved. It then logs you as reviewing the warning. I reviewed this the same day the student saved it, and then talked to him before he went home.



Nicholas Emmert


nemmert@htspacers.org


/Students/2022 Graduation Year


 Saved a Photo on September 8, 2020 at 11:32am

Cyberbullying

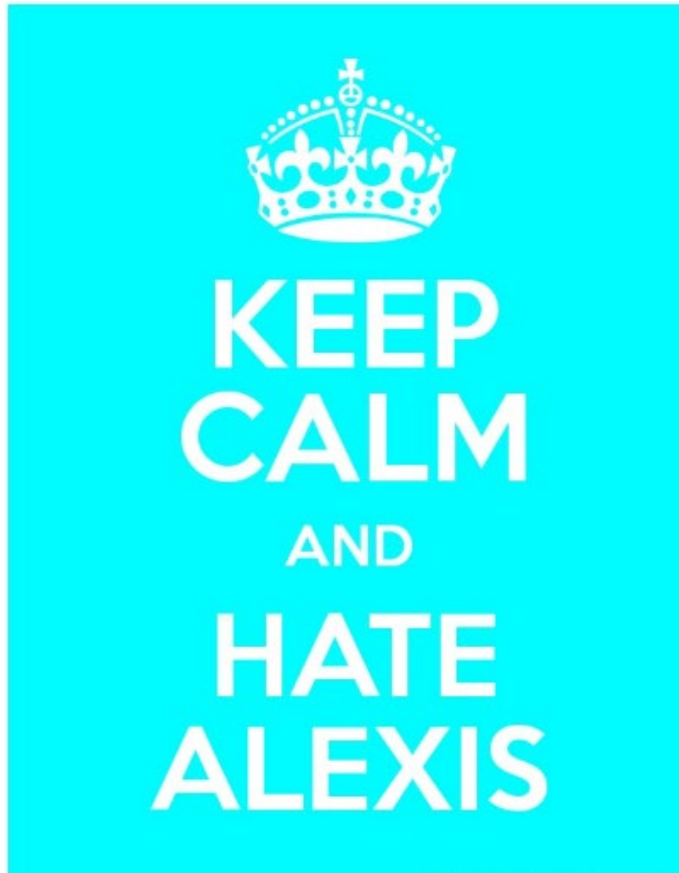
Reviewed by Bill Noll on September 18, 2020 at 10:57am

 Share with Reviewer

 Share with Parents

 Review later

Sep 8, 11:32 am



Here is an example that BARK picked up and notified me as cyber bullying when a student saved this file on his computer.

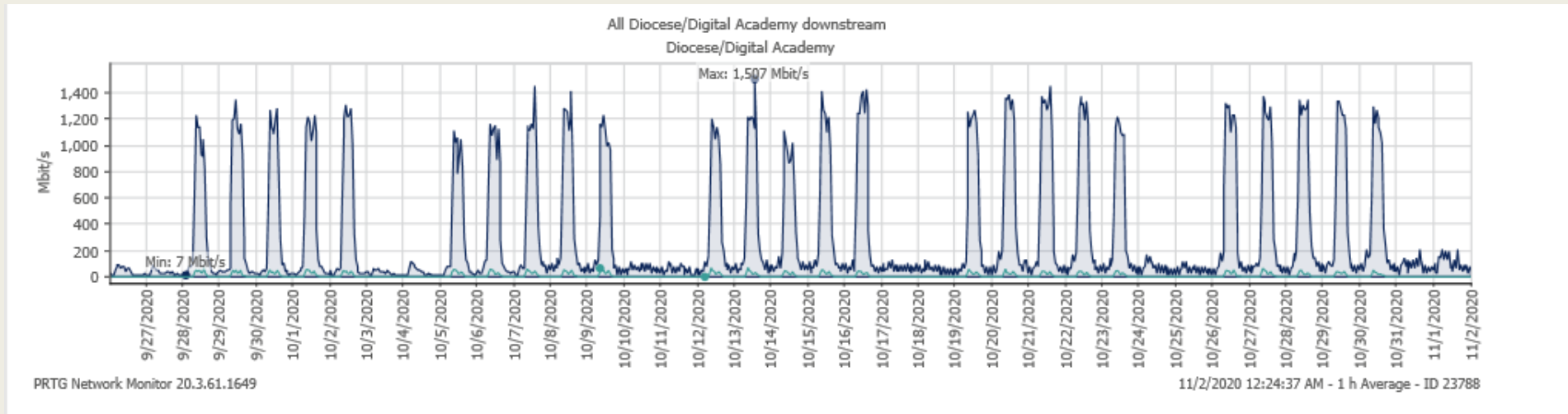
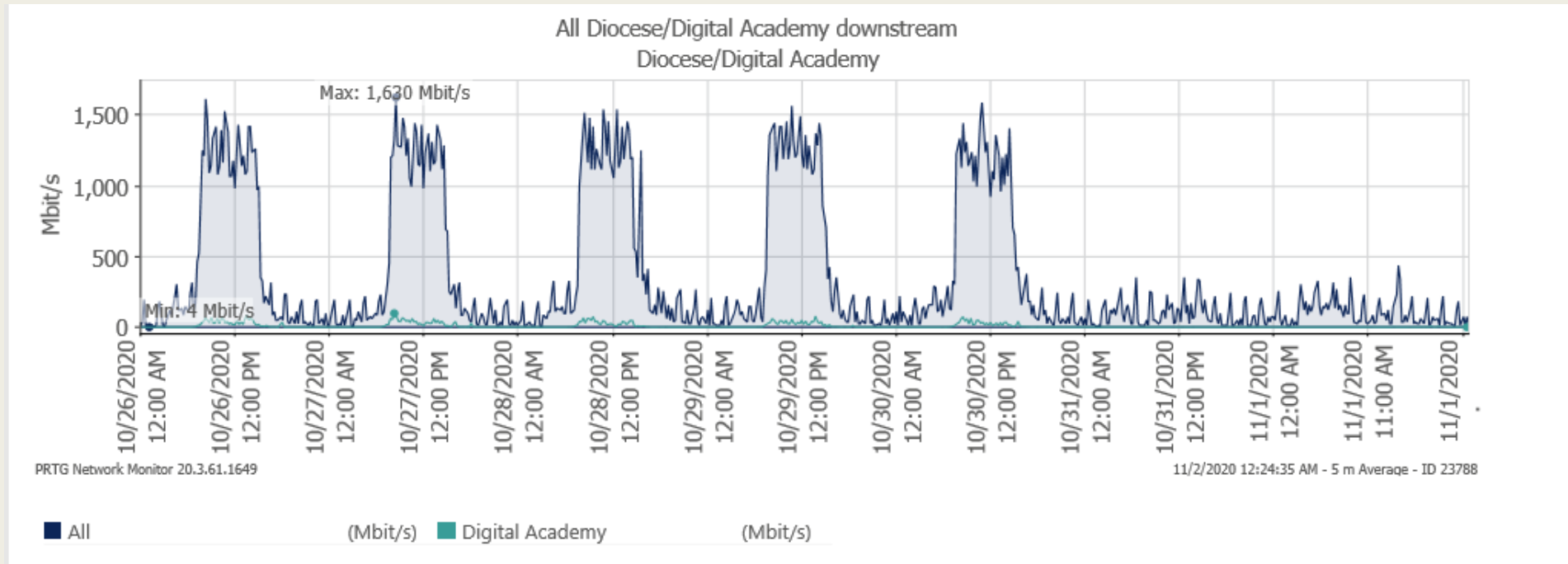
DOJ Legal Hold - eDiscovery

- Any school that uses their own domain is required to set up eDiscovery
 - *You must save*
 - All emails
 - All documents
 - All chats

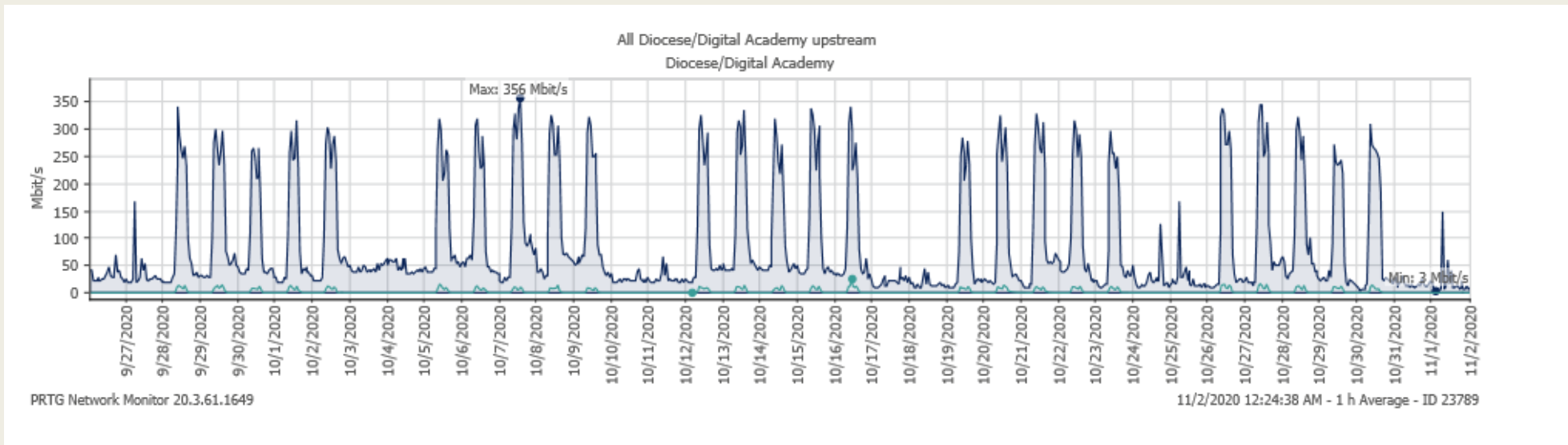
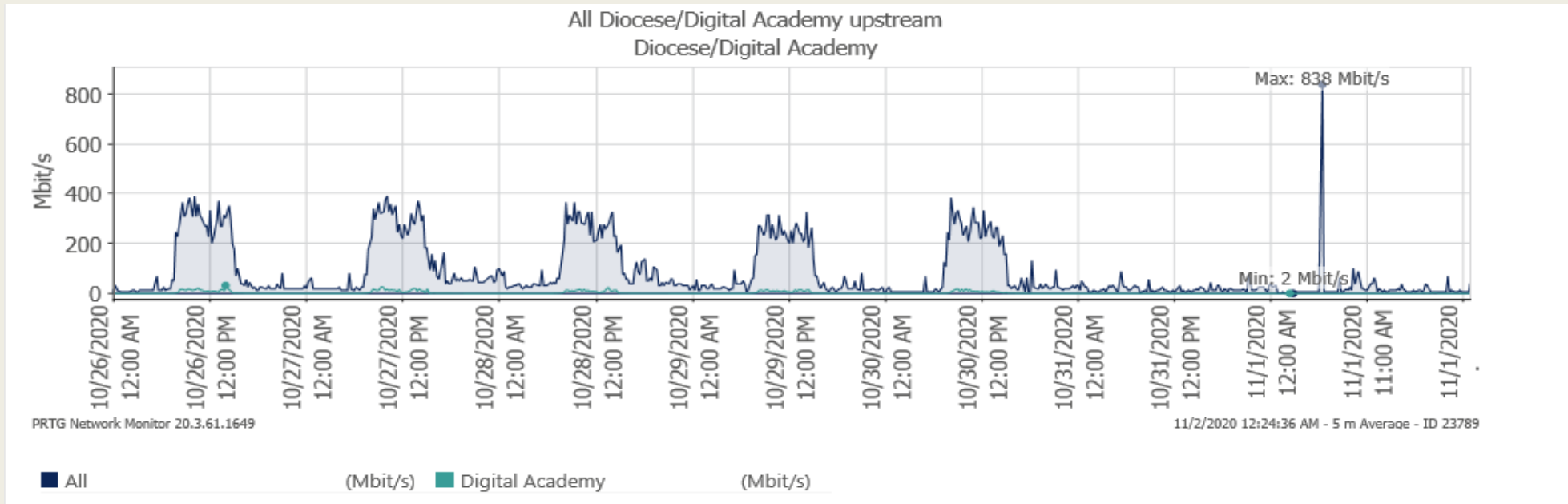
Bandwidth Monitoring

- With the introduction of Digital Academy, there was initial concerns about adequate bandwidth at each of the schools
 - *I get a weekly report of the previous week's bandwidth utilization*
 - Overall
 - *Upstream aggregate*
 - *Downstream aggregate*
 - *Any school can request to get a report for their school*
 - Send me an email with the timeframe you want reported
 - The report will show 1 minute time slices of data, so the report will be very large depending upon the timeframe requested

Bandwidth Monitoring - Downstream



Bandwidth Monitoring - Upstream





Thank You!