CT Education Network:
Commission for
Educational Technology
Quarterly Update

CEN
Connecticut's Trusted Internet Partner

March 7, 2022
1:00PM – 3:00PM
Virtual Meeting
Connection Detail in Invite

Categories have been arranged for alignment with CEN's 2019-2024 Strategic Plan.

1. Provide Value

- DDoS Mitigation Summary Review
  - 2021-2022 Academic Year (August 1, 2021 – Mar 1, 2022)

Number of TMS Mitigations	Volume of Traffic Passed by TMS	Volume of Traffic Dropped by TMS	Volume of Largest TMS Mitigation	Rate of Largest TMS Mitigation	Duration of Longest TMS Mitigation
196	42.30 TB	27.61 TB	18.29 TB	38.42 Gbps	112d 14h 49m
↓49.74%	↑177.32%	↓38.07%	↑205.37%	↑27.81%	↑54.37%

Bottom row indicates increase or decrease from prior period (December 31 2020 22:58 - August 01 2021 0:00).

  - 2022 Calendar Year (January 1, 2022 – March 1, 2022)

Number of TMS Mitigations	Volume of Traffic Passed by TMS	Volume of Traffic Dropped by TMS	Volume of Largest TMS Mitigation	Rate of Largest TMS Mitigation	Duration of Longest TMS Mitigation
53	32.87 TB	13.07 TB	18.09 TB	29.75 Gbps	47d 0h 32m
↑10.42%	↑577.02%	↑95.92%	↑462.28%	↓22.56%	↑16.44%

Bottom row indicates increase or decrease from prior period (October 25 2021 9:59 - January 01 2022 0:00).

  - Previous Year Summaries

Year	Number of TMS Mitigations	Volume of Traffic Passed by TMS	Volume of Traffic Dropped by TMS	Volume of Largest TMS Mitigation	Rate of largest TMS Mitigation	Duration of Longest TMS Mitigation
2021	537	25.41 TB	59.74 TB	6.00 TB	38.42 Gbps	150d 2h 20 m
2020	844	20.84 TB	45.83 TB	6.49 TB	19.99 Gbps	86d 10h 47m
2019	978	2.18 TB	12.04 TB	3.74 TB	20.03 Gbps	2d 17h 54m

Note: Hybrid and/or full learn/work from home due COVID pandemic started in March 2020.

- CT Library Fiber Consortium – Fiber to the Library (FTTL)
  - Project to connect libraries through federal E-rate and matching State Library bonded funds.
  - Many project sites connect underserved communities where connectivity options have remained relatively unchanged for decades. This project provides high-quality service at reasonable costs to bridge gaps in the digital divide and help libraries continue to thrive as community assets.
  - One library from phase 5 is lingering and is under construction, summer 2022 completion.
  - Phase 7: 5 Fiber builds are scheduled with late Spring completion dates.
  - Phase 8: Awarded February 21, 2022, 64 libraries eligible.
  - The current project across all phases (1–7) will bring total fiber-connected libraries to 146 representing 76% of all 191 libraries statewide
- CT Library Fiber Consortium – Internal Connections (FTTL-IC)
  - New Program announced December 3, 2021. https://ctedunet.net/fttl-ic/
  - Goal is to help libraries with internal network infrastructure to better serve library operations
  - Libraries received assessments, prioritized remediation plans, and awards to assist each.
  - Items include switches, routers, WiFi Access points, UPS', target wiring upgrades
  - Call for applicants closed on Feb 21, 2022. 41 libraries applied.
  - Libraries will be put forward for approval from State Library Board on Mar 23, 2022
  - Network infrastructure Assessments begin April 2, 2022

CT Education Network:
Commission for
Educational Technology
Quarterly Update

CEN
Connecticut's Trusted Internet Partner

March 7, 2022
1:00PM – 3:00PM
Virtual Meeting
Connection Detail in Invite

- New Members/Customers since the last Commission meeting (in order of turn up)
    - Windsor Locks Police Department
    - Berlin Fire Department
    - East Berlin Fire Department
    - Kensington Fire Department
    - South Kensington Fire Department
    - Bloomfield Center Fire Department
    - Dixwell Community Center Q-House

    Current Member Count = 664
    *Effective 12-1-21 member count process has been adjusted to reflect multi-site organizations as one member throughout the community.

2. Ignite Innovation

- eduroam https://www.eduroam.us/
    - Goal is to address digital divide issues impacting students learning and provide more seamless network access experience for students
    - Tom Dillon helping coordinate activities as CET Infrastructure Advisory Council Chair, with CEN resources and fiscal support. This is a crossover item between CET Infrastructure Advisory and CEN Service Management Advisory Councils.
    - Suffield Academy, Waterbury Public Schools, Darien Public Schools, and Coventry Public Schools have expressed interest in moving forward and have been provided a 90-day trial process (which can be extended). Goodwin University has initiated their own license agreement.
    - 71 respondents to Secure WiFi & eduroam readiness in schools and libraries. Will re-send and collect more info
    - Preparing an application for Internet2 eduroam Support Organization due in March
- Additional services are in development and will be prioritized based on community feedback
    - With help of SMAC Chair(s), items are categorized and prioritized
    - Unified Communications RFP team meeting monthly to define service categories and requirements and targeting Q3 for RFP publication.
    - UConn procurement will assist with RFP development
    - Aligning initiatives with the existing UConn RFP cycle where possible to make more efficient use of time and effort.

3. Foster Collaboration

- 9th Annual Member Conference; May 5, 2022, https://ctedunet.net/annual-conference/
    - 1 Day in-person event at the CT Convention Center
    - Return to the traditional format of the keynote, 24-28 sessions, breakfast, lunch, happy hour
    - Full Program was announced
    - Early Bird Registration closes 3-30-22 https://cvent.me/yq4Xzl
    - General Info: https://web.cvent.com/event/d84cf038-8339-4fe2-83e9-ed984dd5a1f9/summary
- EDAC - Engagement and Development Advisory Council
    - Co-Chairs: Rebecca Osleger & Karen Warren
    - Future Co-Chairs, Karen Skudlarek, UCONN, and John Mercier, Regional District 17
    - Welcomed 10 new EDAC members

CT Education Network:
Commission for
Educational Technology
Quarterly Update

CEN
Connecticut's Trusted Internet Partner

March 7, 2022
1:00PM – 3:00PM
Virtual Meeting
Connection Detail in Invite

- Received 53 session proposals for CEN member Conference
- Approved 34 sessions
- Added Poster Sessions, (recommended converting 10 sessions)
- Declined/deferred 9 proposals
- SMAC- Service Management Advisory Council
    - Co-Chairs: Matt Ross & Jonathan Garbutt
    - Welcomed 23 new SMAC Members
    - Committee members organizing around community RFPs for
        - Unified Communications
        - Security Services
        - CIPA filtering
- Annual Report
    - The Member Services team performed an overhaul of the CEN Annual Report offering members and stakeholders a comprehensive summary of initiatives and performance in alignment with our strategic plan in a manner that is easy to digest and visually pleasing. https://online.fliphtml5.com/gbpme/pwgp/?1646667151525#p=1

4. Promote Advocacy

- CEN Outstanding Leader Awards (COLA) https://ctedunet.net/cola/
    - 'CEN Members play a key role in the success of our community. To acknowledge those contributions, CEN presents the Outstanding Leader Awards annually to any individual from a CEN member organization who has provided extraordinary leadership, energy, ideas, and achievements for the advancement and development of the CEN community, its products and/or services, and/or its foundational mission, vision, and values.'
    - Submissions are open: https://docs.google.com/forms/d/e/1FAIpQLSfNr45u4OYKHWJJ1_3FwtPLTV5KxqCB0C4CosFZmwWQkVNU7g/viewform?usp=sf_link
    - Awards will be presented at the CEN annual conference
- Government Accountability Office (GAO)
    - Doug Casey (CET) and Ryan Kocsondy (CEN) met with representatives of the GAO to discuss federal efforts to assist K-12 schools to address cyber threats and recover from cyber incidents, and nonfederal views about the adequacy of federal efforts.
    - GAO wanted to understand and obtain information on current cybersecurity issues and challenges at K-12 schools and obtain their views on how to address cyber threats and what they think the federal government should be doing to help resolve cybersecurity issues at K-12 schools.
    - Aside from sharing information and advocating for K-12 specific needs, we assisted with outreach to representative districts and encouraged them to share information directly.
- Internet2 CAP Scholarship Recipients from CEN Membership/Connecticut schools.
    - 15 CT teachers received scholarship awards out of 31 across the US.
    - Over 1200 students will benefit from the scholarships across the U.S.
    - Winning teachers came from schools that connected through 4 different R&E networks.
    - Each teacher will receive a free one-on-one interactive online course of their choosing from the Center for Interactive Learning and Collaboration (CILC.org). These one-on-one courses usually cost between $84 and $336 each.

CT Education Network:
Commission for
Educational Technology
Quarterly Update

March 7, 2022
1:00PM – 3:00PM
Virtual Meeting
Connection Detail in Invite

- Internet2 press release including the full list of Internet2 Distance Learning Scholarship Winners. https://internet2.edu/winners-announced-for-internet2-community-anchor-programs-2022-distance-learning-scholarship/
- Everybody Learns - WiFi Expansion
  - $10M Authorized in June 2021 Special Session for CEN to expand community WiFi
  - Program will be a grant funded to directly attached CEN members, may be used to physically connect sites as needed.
  - CEN working with CET Infrastructure council to advise on program eligibility criteria, application intake, scoring/ranking, and awards.
  - Federal guidance on ARPA program criteria and how to apply for funding was delivered end of January, application in draft and will be submitted in March.

5. Enhance Core Resources

- CEN Staff
  - CEN currently has 11 full-time staff members, 4 part-time student workers, and 1 volunteer (1 day /week)
  - Peter Correia was hired as Financial Manager on Jan 28, 2022
  - Current Job searches
    - Network Security Analyst 2 – Re-Post
    - Network Engineer 1 or 2 – Interviewing
- GlobalNOC Tier 2 Services
  - In February, CEN increased partnership commitment with GlobalNOC to provide supplemental Tier2 Engineering support. This new arrangement will maintain SLO targets to the CEN community while freeing up CEN Engineers to perform more irregular work, projects, pursue training, and serve as subject matter expertise (SME) and Tier3 and escalation support.
- Infrastructure Investments
  - CEN was allocated ~ $2.5M in CEPF funds for equipment maintenance improvements to the infrastructure. This was less than the requested amount and items are being re-prioritized, re-quoted, and sequenced based on price and availability of equipment.
  - Of Note - Component delays are impacting lead times for items such as routers and switches. Lead times can be anywhere from 120-180 days for orders with little relief in sight.
- Governor's Biennium Budget, HB5037, American Rescue Plan Act - Coronavirus Relief Fund (ARPA-CPF) Monies
  - In February, Governor Lamont's biennium budget priorities were released and contained 3 line items that involve CEN and Federal ARPA-CRF Monies. https://portal.ct.gov/-/media/Office-of-the-Governor/2022-Legislative-Proposals/Implementer-fact-sheet---Appropriations-Act.pdf
    - $19.8M - Grant Funding for municipalities and libraries to connect to CEN
    - $38.4M - Upgrades to CEN (or NextGen Infrastructure)
    - $850K - Grant Funding for Charter Schools to connect to CEN