

September 13, 2021 1:00PM – 3:00PM Virtual Meeting Connection Detail in Invite

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

2020 Annual Report

1. Provide Value

- DDoS Mitigation Summary Review
 - o 2020-2021 Academic Year (August 1, 2020 Sep 1, 2021)

Number of TMS Mitigations	S 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
886	34.50 TB	81.43 TB	6.49 TB	30.06 Gbps	26d 4h 58m
1 0.06%	↑ 393.66%	1 96.57%	↑ 74.15%	↑ 50.04%	↑ 4131.25%
110.0070	333.3070	2.30.3770	· · · · · · · · · · · · · · · · · · ·	2 23.0470	741011.2070

2021 Calendar Year (January 1, 2021 – Sept 1, 2021)

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
407	16.09 TB	46.47 TB	5.99 TB	30.06 Gbps	13d 22h 50m
◆ 27.71%	◆ 11.50%	1 34.73%	◆ 6.40%	↑ 50.36%	◆ 15.61%

- CT Library Fiber Consortium Project
 - o 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.
 - Phase 1-4: 57 sites complete & savings of \$1,392,000 (FCC/USAC E-Rate dark fiber IRU savings)
 - Phase 5: 17 sites committed and 16 out of 17 sites are completed
 - Phase 6: 2 sites are completed
 - Phase 7: Awarded on January 14, 2021. 5 committed and waiting for E-rate approval
 - The current project across all phases (1–7) will bring total fiber-connected libraries to 171 (including 47 branches), representing 72% of all 239 libraries statewide
- Judicial Branch Connectivity Project
 - o Project to provide Internet and layer 2 network connectivity across the Judicial branch system
 - 56 sites, 31 courthouse buildings, 26 administrative / support locations
 - o 56 sites have completed fiber construction and network provisioning by CEN
 - o 45 of the 56 sites have been completed on Judicial's side and are in production
 - o Judicial team is turning up more every week as their schedule allows for on-site activities
- New Members/Customers since the last Commission meeting (in order of turn up)
 - Branford Police Department
 - Woodbridge Public Library
 - Paier College

Current Member Count = 659

2. Ignite Innovation

- Service Status Dashboard https://status.net.cen.ct.gov/
 - Dashboard to communicate information about service status, planned and unplanned outages, service disruptions, and other community impacting situations. Content on this page is fed from



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our monitoring systems, as well as ticketing and change management system, allowing the dash to reflect the status of an issue, from identification through resolution.

- o Dashboard includes an interactive map of CEN backbones and their utilization
- This is version 1.0 of the dashboard and will be incrementally improved over time
- 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
 - New Haven Schools implemented as part of COVID WiFi roll out response (SCSU assistance)
 - o Internet2 Support Organization program application for January
 - Preparing survey for gap analysis of required components for 802.11i secure Wi-Fi in schools
- Additional services are in development and will be prioritized based on community feedback
 - With help of SMAC Chair(s), items are categorized and prioritized
 - o UConn procurement will assist with RFP development
 - Aligning initiatives with 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/
 - o 1 Day in-person event at the CT Convention Center
 - o Return to traditional format of keynote, 24-28 sessions, light breakfast, lunch, happy hour
 - Registration open https://cvent.me/yq4Xzl
 - O Call from proposals is open: https://www.cvent.com/c/abstracts/8cf6f3a1-20b1-423a-8088-111891684808
- Quarterly Training / Info Sessions https://ctedunet.net/engagement-events/
 - Al and Proctoring & Alternative Assessments
 - September 23, 2021 at 1 pm for an interactive discussion to learn and share best practices and discuss alternative assessment methods
- EDAC Engagement and Development Advisory Council
 - o Co-Chairs: Rebecca Osleger & Karen Warren
 - Very active remotely, meeting once per month and sometimes bi-weekly.
 - Planed the Virtual Member Conference and discussing quarterly training opportunities
 - The next quarterly training: All and Proctoring & Alternative Assessments will take place remotely on September 23, 2021. https://ctedunet.net/engagement-events/
 - Subsequent quarterly training sessions will include IPv6, iboss Web Filtering updates, Securly Student Safety updates
- SMAC- Service Management Advisory Council
 - o Co-Chairs: Matt Ross & Jon Garbutt
 - Committee members organizing around community RFPs for
 - Unified Communications
 - Security Services
 - CIPA filtering
- Support for CET GoOpenCT.org site
 - o CEN team helped migrate the GoOpenCT.org site to the CEN's G-Suite Cloud for better support



4. Promote Advocacy

- Everyone Learns Initiative WiFi Hotspot Project https://ctedunet.net/everyonelearnswifiinitiative/
 - o Leverage CEN network and member locations to provide WiFi Hotspots across 40 target towns
 - Original scope was \$2.2M; \$1.7M authorized to provide walk-up/drive up WiFi service through external/on-building mounted 802.11AX wireless access points.
 - Cost includes software licensing, equipment, enclosures, wiring, material, labor, project management, bandwidth for 1 year, etc.
 - APs and installation are donated to the participating member location; CEN will manage for the first year.
 - o Project delays due to scheduling and COVD related access delays at participating sites
 - o 152 sites online, 2 pending
- Member Spotlight Articles https://ctedunet.net/spotlightarticles/
 - The CEN Member Relations Team conducted a series of interviews with Members to better understand how CEN services are being utilized and what value it provides.
 - Two completed: Central Connecticut State University, The Open Hearth plus an article profiling CEN's COVID Response
 - Several draft articles are under review: Mystic Aquarium, Connecticut Science Center, CT State Library, The Bushnell, and Firewall Service Members.
 - o Submit concepts / proposals for articles here: https://ctedunet.net/spotlightarticleproposal

5. Enhance Core Resources

- CEN Staff
 - CEN currently has 11 full-time staff members, 2 part-time student workers, and 1 volunteer
 (1 day /week)
 - Rori Ziegwied, CEN's part time fiscal manger, recently took a new position with Department of Criminal Justice.
 - Job searches
 - Network Security Analyst 2 Interviewing
 - Program Assistant 1 advertising, post will close 9/13
 - Financial Manager 1 JD complete, search in approvals
 - Network Engineer 2/3 will post in FY 22 after NSA2 is filled
 - Financial Assistant 1 role that was filled in March is now vacant. Will review JD once new financial manager is on board
- Hub/Distribution Layer Equipment Upgrades
 - \$1.5 M bond allocated to replacing devices at distribution layer of the network that are end of life/end of support. Will bring 100G backbones to busiest hub-sites in the network
 - o Implementations underway, roughly 3/4 deployed
 - o COVID related challenges include travel, scheduling, and access to site facilities
- iBoss Capacity Increases
 - Stability issues in last academic year and subsequent measures to improve
 - New f5 BigIP load balance platform was installed in May/June 2021 and stabilized the service
 - o In August, upgraded to f5 VELOS platform that replaced the previous f5, which was undersized
 - Very stable, continuing to monitor and tune for performance