

Categories have been arranged to align with CEN's [Strategic Plan](#).

1. Provide Value

- DDoS Mitigation Summary Review

- 2023-2024 Academic Year (August 1, 2024 – March 1, 2024)

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
57 ↓71.50%	1.18 TB ↓89.24%	6.80 TB ↓67.64%	4.79 TB ↓15.29%	142.93 Gbps ↓7.58%	4d 1h 29m ↑2755.77%

Bottom row indicates increase or decrease from prior period (January 07 2024 6:58 - August 04 2024 4:00).

- 2024 Calendar Year (January 1, 2025 – March 1, 2024)

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
24 ↑300.00%	42.65 GB ↓94.57%	104.35 GB ↓98.24%	104.13 GB ↓97.83%	7.81 Gbps ↓94.54%	4d 1h 29m ↑56871.59%

Bottom row indicates increase or decrease from prior period (October 31 2024 18:20 - January 01 2025 5:00).

- CT Library Fiber Consortium – Internal Connections (FTTL-IC) <https://ctedunet.net/fttl-ic/>
 - The goal is to help libraries with internal network infrastructure to serve library operations better. Phase one (assessments and reports) is fully complete.
 - Phase 1 - Assessments. 41 Libraries received assessments and recommendations.
 - 5 Libraries implemented recommendations on their own
 - Phase 2 - Remediations and Completion: State library has authorized funding for recommendations made in assessment reports, award contracts have been signed, and funds have been released for individual libraries for equipment and labor to remediate issues. CEN/Novus Insight is working with them to review equipment lists, update as needed, initiate purchases, and schedule work dates. - This process is ongoing in batches.
 - 36 libraries are moving forward with this phase.
 - 33 are complete and in the final closeout stage.
 - 3 libraries are in progress (work has been or is in the process of being scheduled).
 - Projected program completion is end of March
 - All projects must be completed by April 30, 2025; any funds not fully expended by then must be returned to the State Library; extensions can be requested.
- New Member-Customers since the last Commission meeting (in order of turn up)
 - Lost Acres Fire Department Granby
 - Bill Memorial Library
 - Kent Town Hall
 - Westbrook Town Hall
 - Hamden Town Hall
- New *connections* to existing CEN members since the last Commission meeting
 - Motor Vehicle Network, responsible for WiFi at DMV locations (correction from last report)
 - Willimantic, Winsted, New Britain, Old Saybrook
 - Department of Transportation (DOT) - *CEN is providing transport connectivity to DOT Headquarters and 62 Maintenance facilities and garages over a period of two years. Sites will be listed as they are completed. 59 sites are complete as of this report.*
 - Orange Maintenance Garage

- Farmington Maintenance Garage
 - East Lyme Office/Maintenance Garage
 - Union Maintenance Garage
- Exiting Member-Customers since the last Commission meeting disconnecting (in order of turn down)
 - None

Current Member Organization Count = 693

*Effective 12-1-21 member count processes are adjusted to reflect multi-site organizations as one member throughout the community.

2. Ignite Innovation

- PerfSONAR Servers
 - perfSONAR is the **performance Service-Oriented Network monitoring Architecture**, a network measurement toolkit designed to provide federated coverage of paths, and help to establish end-to-end usage expectations, ensuring friction free use of networks for scientific applications. This open-source infrastructure helps to identify and isolate problems as they happen, making the role of supporting network users easier for engineering teams, and increasing productivity when utilizing network resources.
 - Scope is to install 100Gbps PerfSONAR servers at the hub and extranet sites to provide independent tooling for measurement of capacity and throughput helping ensure the highest quality of network experience for the membership and will make these available to the community to run diagnostics from any member site.
 - March Update - 13 of 30 devices installed; projected completion end of summer 2025.
- eduroam <https://www.eduroam.us/>
 - Goal is to address digital divide issues impacting Internet access and provide a more seamless and secure network access experience for students, faculty and staff at learning institutions and affiliate locations.
 - CEN's application for the Internet2 eduroam [Support Organization](https://internet2.edu/internet2-announces-new-eduroam-support-organizations/) program was accepted and will be one of 5 across the country. <https://internet2.edu/internet2-announces-new-eduroam-support-organizations/>
 - eduroam Support Organization (eSO) contract agreement between CEN and Internet2 is complete. New CEN member organizations can be onboarded at will without signing an I2 agreement. CEN has a member subscriber agreement for new eduroam subscribers and will work with the early adopters to convert their I2 based agreements to CEN based agreements.
 - Current subscribers and users: New Haven Public Schools, Darien Public Schools, Suffield Academy, Waterbury Public Schools, Middletown Schools, Choate Rosemary Hall, and ACES. Achievement First schools in process.
 - eduroam is a grant eligible activity in the ARPA Community WiFi program.
- Grant Activity
 - CT State and Local Cybersecurity Grant Program (SLCGP) administered by Department of Emergency Management and Homeland Security (DEMHS)
 - Applied for round 1 funding in July. Grant application included improving cybersecurity awareness across the community via subsidies to CyberNutmeg and leading cooperative purchasing activities through a dedicated product manager who will coordinate activities.

- *Notice of Selection received in November, partial award pending.*
- Broadband Equity, Access, and Deployment (BEAD) program administered by CT Department of Energy & Environmental Protection (DEEP), Office of Telecommunications and Broadband (OTB)
 - CEN was pre-qualified, one of ten providers.
 - OTB Published Eligible CAI list December 18, 2024; Guidance on applications mi-January
 - DAS - CEN submitted a \$32M grant application on Feb 25, 2025
 - Our application is exclusively focused on connectivity to community anchor institutions (CAIs). Of the ~1500 eligible CAI locations published under BEAD, CEN has proposed connecting 263 of them across 91 municipalities, with 20-year IRU Fiber, and 100G capable devices. Breakdown of the 263 is as follows:
 - 223 K-12 School Buildings
 - 20 Healthcare Facilities
 - 16 Libraries
 - 3 Municipal Government Offices
 - 1 Community Center
 - For every entity that gets connected, they would receive enterprise level, high speed, high-capacity broadband connectivity, with dedicated bandwidth, excellent service, and affordable expandability through the period of performance and beyond.
 - We are optimistic about our application and will keep an eye out for responses from DEEP OTB as it moves to review.
 - These grants take a huge effort to assemble, and many helped contribute to this one. Timing was tight to respond and prepare the applications, from when the CAI list was published, and program application guidance was published (6 weeks).

3. Foster Collaboration

- EDAC - Engagement and Development Advisory Council
 - Co-Chairs: Karen Skudlarek, UCONN; Cathie Drury, Coventry Public Schools
 - Annual Member Conference, *CEN Connect 2025* May 7-8, 2025, at CT Convention Center
 - Celebrating 25 years of service!
 - Day 1: 8 Long-form pre-conference workshops, vendor exhibition, after hour social event at CT Science Center for all attendees on day 1 and 2.
 - Day 2: Traditional format, AM welcome and keynote, all-day vendor exhibition, after hours social
 - Event Site: <https://events.ctedunet.net/event/cenconnect/summary>
 - Member Trainings
 - Upcoming - Artificial Intelligence (AI) Seminar Series 'From Knowledge to Application'
 - Jan 2025 - Dec 2025
 - <https://events.ctedunet.net/event/3380bb19-b3df-4ef7-9da8-80c5f634dffd/seminars-quarterly->
 - Multipart series on AI in partnership with Isidore 'Izzy' Sobkowski. Mr. Sobkowski is a recognized global leader with over 45 years of hands-on experience with advanced AI solutions and holds a US Patent for Ethical Artificial Intelligence. His experience spans R&D, sales, marketing, intellectual property, and technology delivery with a demonstrated history of successful ideation and deployment of high-tech projects and businesses including Chief Digital Officer of Stamford, CT; Artificial Intelligence Specialist at the US Patent and Trademark Office; CIO of NYC Health and Human Services; Global Technology Strategist at Microsoft; Artificial Intelligence Lead for Surveillance and

Compliance at New York Stock Exchange; and AI Division Vice President at Computer Associates. Mr. Sobkowski won the Microsoft Award for Best Product of the Year for AI and has achieved the coveted upper right-hand position in Gartner's Magic Quadrant for a company he founded, Professional Help Desk and for his underlying AI technology called Experience-Based Reasoning (EBR).

- Seminar 1: Foundations of AI
January 21, 2025 @ 11AM - 12:30PM
 - Seminar 2: Ethical and Social Implications of AI
April 8, 2025 @ 11AM - 12:30PM
 - Seminar 3: Strategic Implementation of AI
July 8, 2025 @ 11AM - 12:30PM
 - Seminar 4: Future Trends and Practical Applications
October 14, 2025 @ 11AM - 12:30PM
- SMAC- Service Management Advisory Council
 - Co-Chairs: Ken Sayers & Jonathan Garbutt
 - Council meetings scheduled for 10/2, 12/13, 3/11
 - Committee members are organizing around aggregated services available for members.
 - Unified Communications - RFP team comprising DAS procurement and SMAC members developed timeline for publication in the next 4-6 months
 - Security Services - building new survey feedback for the community to help provide priority and direction for the committee and CEN to pursue.
 - Pricing and Port based model - with the new platform being built, will solicit feedback from council and community on port speed and pricing options moving forward.
 - CIPA filtering - on hold, discussing options.
 - Services Reviews: Walk through of services to review service life cycles will continue:
https://ctedunet.net/wp-content/uploads/sites/2510/2021/12/2020-10-20_CEN_Service_LifeCycle_Process23.pdf
- Connecticut Higher Education Roundtable on Information Security (CHERIS)
<https://ctedunet.net/cheris/>
 - Co-Chairs: Owen Brandt, ECSU; John Schaeffer, Conn College
 - Forum of Higher Education IT security professionals that meets quarterly to collaborate on IT solutions, discuss best practices, and share security challenges.
 - No updates
- Cyber Nutmeg <https://ctedunet.net/cybernutmeg/>
 - Cyber Nutmeg 2025 Planning is underway. Partnership with CTNG will continue in 2025 as we look to build on recent successes and continue to focus on improving cybersecurity awareness, threats, and defenses for community anchor institutions.
 - Date: Mid-October
 - Venue: TBA

4. Promote Advocacy

- Outstanding Leader Awards - Call for nominations (<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.'

- Non-CEN Members, such as R&E members, vendors, or resellers, may be considered on an individual case basis
- Submissions are open: <https://docs.google.com/forms/d/e/1FAIpQLScsGomznTc3ziX8d8A2u2--nAabcjuNabPjS9Agqb8uFkb4bw/viewform>
- Awards will be presented at the CEN annual conference.
- Internet2 Trusted Infrastructure Platform
 - Director Kocsondy is co-chairing a meeting series for network connector principals across the country to further develop plans, goals, and strategies for Internet2's 'trusted infrastructure platform' helping further secure the national R&E backbone. Goals of the program are:
 - Support National and Global Research
 - Initiate National Peering and Routing Optimization
 - Deliver Network Transparency
 - Enhance Routing Integrity for the US and Global R&E space
 - Leverage Network Automation and Self-Provisioning

5. Enhance Core Resources

- CEN Staff
 - CEN currently has 15 full-time staff members, 3 part-time student workers, 1 contracted specialist, and 3 special payroll.
 - Upcoming Searches
 - Network Engineer – Repost
 - Cyber Security Engineer – scoring applicants
 - Cybersecurity Analyst - 2 positions - scoring applicants
 - GIS Specialist – on hold
 - Member Services Coordinator - posting complete, scoring applications
- Domain Name Server upgrades
 - CEN upgraded its DNS server infrastructure with new hardware and software, further enabling hosting to CEN members.
- In partnership with the Northeast Research and Education Network (NEREN)
 - CEN is part of a collaborative effort to connect the Massachusetts Green High Performance Compute Center (MGHPCC) to the NEREN backbone. This connectivity will help CT based researchers and their institutions by providing high throughput connectivity and access to resources at the MGHPCC and beyond. Components include:
 - Optical node install to integrate MGHPCC into NEREN fabric
 - Optical node installation in Lee, Mass on schedule to add east-west resilience to MGHPCC
 - New service with Internet 2 to set up an 'Exchange' for NEREN partners to aggregate services in the region fostering collaboration and cost control.
 - Status: NEREN optical node installation at MGHPCC in complete. Lee Mass node and fiber target completion in winter 2025 time frame.
- CEN Connect (ARPA-CPF) Project Updates
 - CENConnect is a program that provides direct investment in middle-mile broadband infrastructure in support of Connecticut's municipalities, schools, colleges, universities, libraries, healthcare, open access, and cultural arts institutions, through upgrades and expansion of the CEN (<https://ctedunet.net/cen-connect/>). In addition, the program offers grant funding opportunities to attach to the CEN platform for Community Wi-Fi access to CT citizens in need.

Program funding is made available as part of Governor Lamont's Connecticut Plan for the American Rescue Plan Act. Federal funding agency is the US Department of Treasury.

- Next Generation Infrastructure (NGI)
 - Scope: Comprehensive upgrade of the CEN equipment infrastructure bringing 400G backbone and handoff options of 1G, 10G, 25G, 40G, 100G, and 400G to every member location.
 - Site survey / audit of every service location - Complete May 31, 2024
 - Network Lab / Automation / Orchestration build out – Complete
 - Optical Upgrades – 100% complete as of November
 - Packet Upgrades – 10% complete; member installations start in March and continue through the end of the year.
- Connecting Connecticut's Communities Initiative (C3I)
 - Target Member Communities: Libraries, Municipalities, COGS, and Charter Schools
 - Scope: Expand network services to target members/sites with free fiber build
 - Current progress update:
 - 176 total potential participants
 - 137 engaged (interested parties we call hand raisers)
 - 89 commitments (signed agreements), 78 declined
 - For those who have declined, the US Treasury has approved reallocation of funds to committed participants to connect more facilities.
 - 163 (up from 118) additional sites being quoted (e.g. Community Centers, and/or other municipal facilities)
- Community WiFi <https://ctedunet.net/cwifi/>
 - Scope: \$10M Grant funds to expand WiFi to communities in need, expand 'eduroam' adoption / use.
 - Program was officially announced on December 17, 2024
 - We held virtual info sessions describing the program and providing an opportunity for question and answers. 187 total attendees.
 - We are holding virtual office hours for drop in questions and answers to applicants every Tuesday at 10AM between the application open and close dates (6 in total).
 - Important timeline info:
 - 12/17/2024 Program announced, guidance published, public comment open
 - 1/9-16/2025 Virtual Info Sessions (4)
 - 1/22/2025 Virtual Info Session for Vendors (1)
 - 1/24/2025 Public Comment Close, Documents Updates, FAQ updated
 - 2/3/2025 Application Window Open
 - 3/13/2025 Application Windows Close
 - 3/14-4/24/2025 Application Review Period
 - 4/25/2025 Award Notifications
 - 5/1/2025 Agreements and Disbursement of Funds Start
 - 7/1/2026 Substantial Completion for all Sub awardees
 - 9/30/2026 Close Out and Final Documentation

