CEN
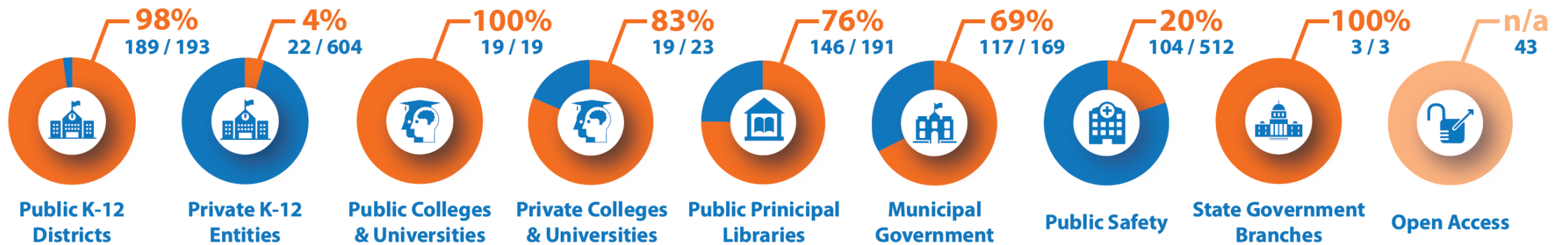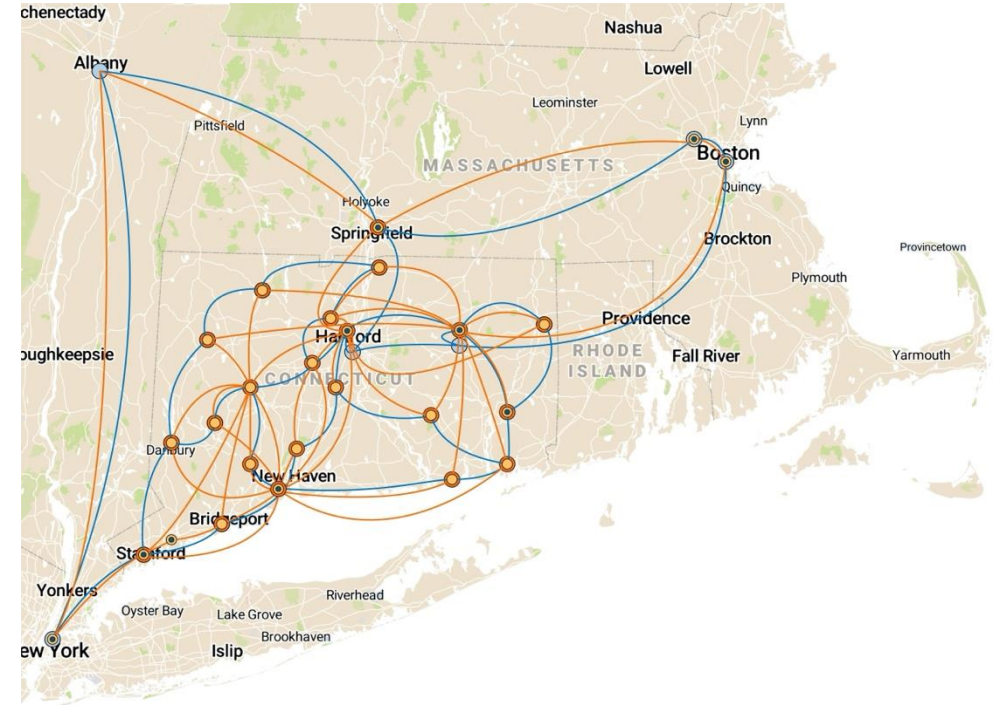
Connecticut's Trusted Internet Partner

NETWORK | SECURITY | CLOUD | COMMUNITY
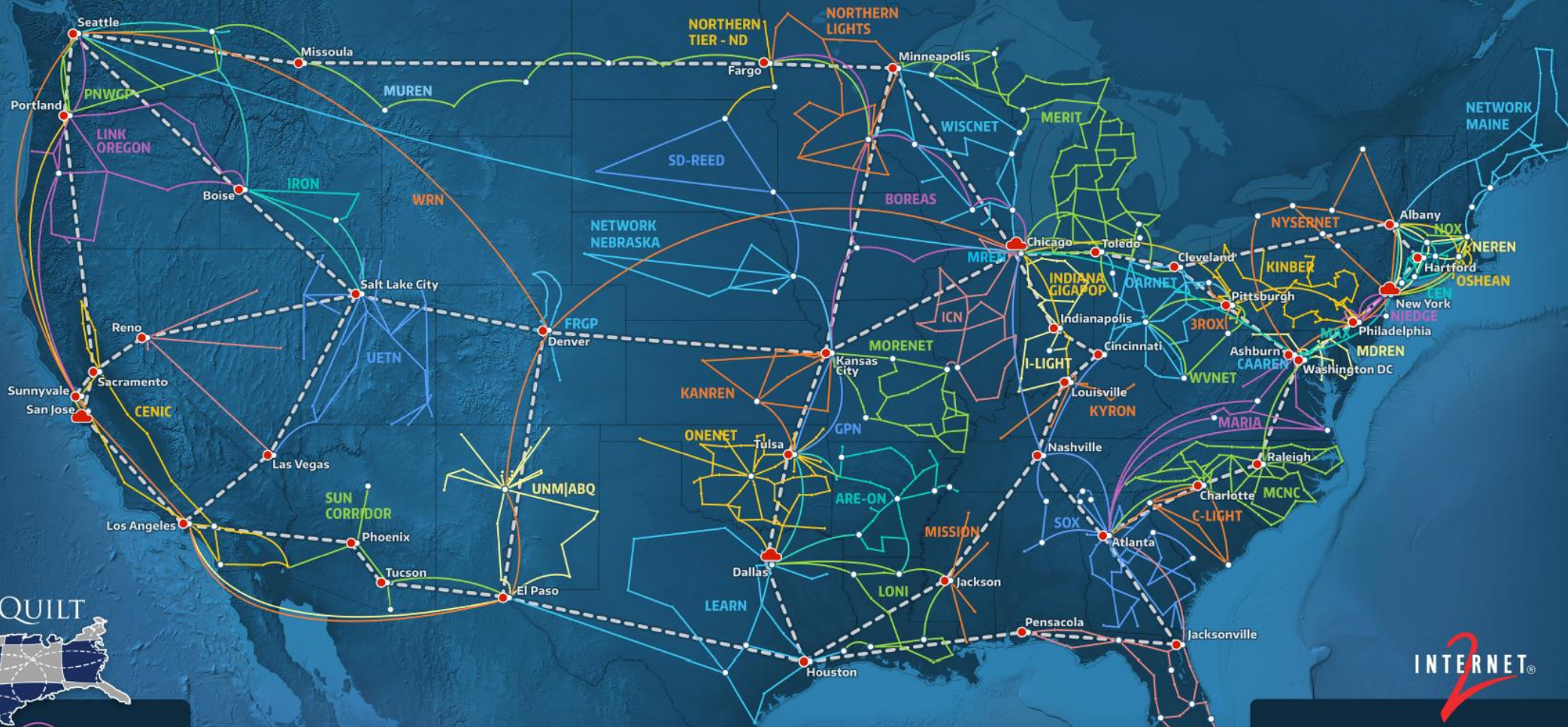
ABOUT CEN

- Established in 2000
- Governed by the CET (https://ct.gov/ctedtech)
- State owned cyber infrastructure, managed by UConn
- Main office in Hartford, CT
- Non-Profit, Open-Access, Middle Mile Network
- Nation's first all optical network to connect every K-12 district (2005)
- One of ~ 40 'Research & Education Networks' nationally (https://www.thequilt.net/)
- Focus is on CAIs and their needs, 680+ Member Orgs.

98% 189 / 193	**4%** 22 / 604	**100%** 19 / 19	**83%** 19 / 23	**76%** 146 / 191	**69%** 117 / 169	**20%** 104 / 512	**100%** 3 / 3	n/a 43
Public K-12 Districts	Private K-12 Entities	Public Colleges & Universities	Private Colleges & Universities	Public Prinicipal Libraries	Municipal Government	Public Safety	State Government Branches	Open Access

INTERNET2 & REGIONAL RESEARCH AND EDUCATION NETWORKS (REN) IN THE UNITED STATES

One Connection | Many Possibilities

SERVICE OVERVIEW

Network

Dedicated Internet Access (Commodity Internet, Internet2, peering), Advanced L2/3 services, DNS Hosting, more...

Security

CIPA Filtering (free for K-12 & Libraries), DDoS Mitigation (free), Managed & Firewall, DNS Firewall (free), Student Safety...

Cloud

AWS-DC, Google-CP, Microsoft-ER, Oracle-OCI, Peering / IXP, Rapid Private Interconnect, Custom transit...

Community

Advisory Councils, Member Conference, Workshops, briefings, Research Support, 24x7NOC...

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COMMUNITY WI-FI GRANT PROGRAM OVERVIEW

Overview

- $10M Grant Funds
- Preparing Program Launch in January

Info / Benefits

- **Administration:** by CET, supported by CEN, grant sub-awardee oversight required

- **Target:** underserved, typically economically disadvantaged groups; increases reach of public Wi-Fi across the state

- **Scope:** Primarily addresses wireless buildouts, which may also require establishing connectivity to CEN. Applicants can use funds to directly connect to CEN for Internet services (IE fiber build is eligible use)

- **Partnerships:** encourage and favor proposals with multiple entities working together, such as municipalities, schools, libraries, community centers, cultural arts institutions, etc.

- **Sustainability:** Require assurances that applicants will support the wireless service for the funding period (5 years) and after.

- Awardees encouraged to broadcast the **eduroam** service set identifier (SSID).

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COMMUNITY WI-FI GRANT PROGRAM OVERVIEW

Overview

- $10M Grant Funds
- Second round applications open now

Expected Timeline

- **Grant Application Window:** 4/15/25 – 6/30/25
  - Office Hours will be available 4/29/25 and 5/1/25
- **Grant Application Review:** As received
- **Grant Awards:** Following review
- **Rolling Installations, Monitoring, Close Out:** Open
- **Program End:** June 2026

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COMMUNITY WI-FI GRANT PROGRAM OVERVIEW

Overview

- $10M Grant Funds
- Preparing Program Launch in January

Award Types

- **Full Program Award:** Applicable for projects without infrastructure required to participate. Funds projects requiring new construction, renovations, or build-backs to establish wireless internet services at CAIs, which may or may not include integration with eduroam.

- **eduroam Only Award:** Applicable for projects with infrastructure required for eduroam. Funds projects that may only need to add the hardware, software, or professional services required to implement access points that can broadcast the eduroam SSID.

- **Partial Program Award:** Applicable when CEN determines a project may receive an award for part of the project proposal in an effort to spread awards equitably across impactful projects.

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COMMUNITY WI-FI GRANT PROGRAM OVERVIEW

Overview

- $10M Grant Funds
- Preparing Program Launch in January

Eligibility

- Lead applicant must meet the definition of a 'Community Anchor Institution' or CAI (defined below).
- Lead and partner applicants must qualify as a government entity, non-profit, education sectors, or fall into a private for-profit
- Be eligible and in good standing to receive federal or state grants
- Be registered with SAM.gov and able to provide their UEI number
- Ability to produce a partnership agreement or MOA when multiple entities are partnering up for an application

COMMUNITY ANCHOR INSTITUTION.—The term ''community anchor institution'' or 'CAI' means an entity such as a school, library, health clinic, health center, hospital or other medical provider, public safety entity, institution of higher education, public housing organization, or community support organization that facilitates greater use of broadband service by vulnerable populations, including low- income individuals, unemployed individuals, and aged individuals.

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COMMUNITY WI-FI GRANT PROGRAM OVERVIEW

Overview

- $10M Grant Funds
- Preparing Program Launch in January

Project Prioritization Criteria

- Leverage community partnerships among schools, libraries, municipal service providers (e.g., senior centers), other CAIs, and private entities whose project shows a coordinated effort to streamline and expand reach within a single application

- Include a clear sustainability plan that describes how services will be managed and maintained after the funding period ends

- Integrate eduroam and capability to install access points that broadcast the eduroam service set identifier (SSID)

- Meet or exceed the minimum wireless internet speeds of 1 gigabit-per-second symmetrical download and upload (i.e. 802.11AC <> Wi-Fi 5, or better)

- Include in-kind contributions as part of matching funds (encouraged though not required)

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COMMUNITY WI-FI GRANT PROGRAM OVERVIEW

Overview

- $10M Grant Funds
- Preparing Program Launch in January

Reporting Requirements

- Subrecipients must cooperate with all federal reporting obligations for ARPA – CPF funding and any other statues, regulations or executive orders applicable to use of federal funds for the duration of the project
- Track data points including but not limited to dates, locations, technical specifications/plans, network performance etc.
- Post-award monitoring of subrecipients by CEN that may include but is not limited to requests for information or field audits
- Project & Expenditure Report must be completed quarterly with project-level information
- A final Project & Expenditure Report would be completed upon project completion and submitted with the Project Completion Affidavit

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COMMUNITY WI-FI GRANT PROGRAM OVERVIEW

Overview

- $10M Grant Funds
- Preparing Program Launch in January

Procurement Requirements

- A federal grant recipient or subrecipient means a non-federal entity (NFE) such as a State, local government, Indian tribe, Institution of Higher Education (IHE), or nonprofit organization that carries out a Federal award as a recipient or **subrecipient**.

- Subrecipients must comply with the federal requirements that procurements must meet to be considered eligible expenses.

- Conform to Federal Acquisition Regulations 2 CFR 200.317 through 200.327.

- CEN will provide the Federal Terms & Conditions to each awardee.

- This requirement will be part of the Grant Agreement between the awardee and the State.

- Refer to the Federal Grant Procurement Compliance Checklist (2 CFR 200) document on the program website.

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SUPPLEMENT vs SUPPLANT

SUPPLEMENT

- Simply put means to 'add to'
- Federal agencies encourage supplementing-adding funds to existing state or local funds - add to or augment
- Examples:
  - Need to add new or compliant hardware to make eduroam work
  - Want to build out a location that has very little to nothing for connectivity
  - Use finds to expand on an existing grant and provide more capability or reach (be clear on what is covered by both and how both can stand alone on their own funding)

SUPPLANT

- Simply put means to 'replace'
- Federal regulations strictly prohibit grant funds supplanting, or replacing, state, local, or agency funds
- Examples
  - Project or equipment was already in an approved budget.
  - Equipment and/or labor already purchased for deployment (reimburse an existing project).
  - Federal or State grants cannot be used as matching funds for grants

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USE CASES

CEN CONNECT

eduroam expansion

Add eduroam to your existing Wi-Fi network

- Upgrade hardware to support 802.11i / WPA2 Enterprise
- Add RADIUS servers (hardware, software, licensing)
- Use professional Services to install, configure, and integrate.
- Federate to eduroam network and expand access to all educational communities.

Public Spaces

Indoor or Outdoor Wi-Fi access targeting communities in need

- Parks, Recreational Areas, Green Spaces
- Public Libraries
- Community Centers
- Schools and Universities
- Cultural Arts Institutions
- Public Housing Complexes
- Public Transportation Hubs

Connectivity to CEN

Attach to CEN Fiber Network to also offer public Wi-Fi

- Cover cost of fiber build to connect to CEN
- Network Router / Switch
- Professional Services (PS) directly related to the turn up of services.

CT CGA PA 22-118 as Amended by PA 22-146

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HOW TO PREPARE

- Visit the CEN Application Portal to download and review all program documents Program Guidance

- Gather the information needed for the application

- See FAQs and New Applicant Tool Kit for application help

- Email questions to "cenwifigrant@cteducation.net"

- Prepare the content needed for submission with the application

- Complete the online application via the CEN Application Portal

APPLICATION OVERVIEW

Section Title	Summary	Applicant Required Uploads
Intake	Lead and partner applicant organization details and points of contact	• Partnership Agreements or MOA's
Project Overview	Project summary, location and minimum internet speed	• Statement on Organization & Experience • Executive Summary
Project Budget	CPF funding requests, requests for advances as capital, delineation of administrative costs when applicable, and details on any acquired non-CPF funding including amounts and sources	• Project Budget • Statement of Viability
Project Details	Project timeline and end date, and current CEN connection status	• Project Timeline • Technical Specifications • Identified Risk and Mitigation Plan
Project Impact	Demonstrated project impact (no questions, only uploads)	• Project Impact Statement • Letters of Support
Project Prioritization	Brief summaries on how projects address applicable project prioritization criteria	*(No uploads)*
Attestations	Attestations of understanding and agreements	• Applicant Affidavit

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GRANT APPLICATION GENERAL ADVICE

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Login Early	• Get your grant portal access sorted out right away, navigate the space, review info, fill out what you can that is easy and straightforward. PLEASE DO NOT WAIT
Use the Checklist	• Lists documents and needed items that should be ready at the time of application. • Create files to upload and google or word docs with text to copy/paste as needed.
Make the point	• Address the points in the scoring rubric so evaluators can clearly read and tie items to point values. Direct and to the point is always best.
5-Year Horizon	• Period of performance is 5 years. Hardware licensing can be included for the full term.
Ask Questions	• If you have questions, ask, we want to get you answers and keep the process moving. • E-mail, attend webinars, office hours, etc.
Note:	• Applicant may request an advance of a portion of the grant award

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GRANT ADMINISTRATION TEAM

-Doug Casey
-Executive Director, CET

-Patrick Welch
-Grant Program Manager, CEN

-Ryan Kocsondy
-Executive Director, CEN

-Maddie Klimkoski
-Community Engagement
Coordinator, CEN

-Mike Thornton
-CPPO – Practice Lead, Civic

-Wendy Rego
-Member Services Specialist, CEN

-August Gryparis
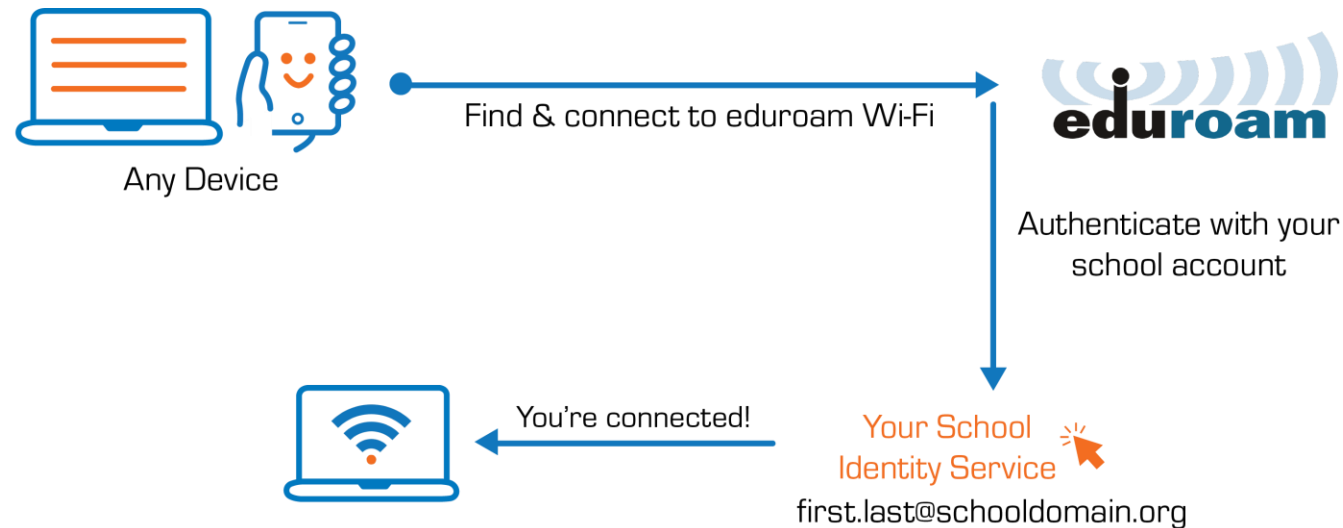-Program Analyst, Civic

-Peter Correia
-Finance Manager, CEN

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- **eduroam** is the secure, world-wide roaming wireless service that allows students, faculty, and staff to roam on Wi-Fi networks and find connectivity.
    - 2,500 participating locations in the US, and more than 33,000 worldwide.

- **How do I connect?**
    - Find eduroam in your list of available networks and connect using your school email address and account password. More information is available on our website.

Any Device

Find & connect to eduroam Wi-Fi

Authenticate with your
school account

You're connected!

Your School
Identity Service

first.last@schooldomain.org

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Why eduroam?

- Supports Students & Faculty on the Move: Secure, automatic access for academic visitors.

- Promotes Lifelong Learning: Enables access to online academic resources on-site.

- Bridges the Digital Divide: Offers internet access for students without home connectivity.

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Staff & IT Benefits

- No More Guest Accounts: Eliminates need for temporary credentials.

- Low Overhead: Authentication is managed by the user's home institution.

- Builds Institutional Connections: Strengthens ties with local schools and universities.

Technical Overview

- Uses WPA2/WPA3-Enterprise with secure EAP methods (e.g., PEAP).
- No user database needed locally—uses RADIUS hierarchy.
- Compatible with most enterprise-grade Wi-Fi equipment.
- Enables secure credential tunneling with encrypted connections.

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How to Get Started

1. Connect with your state/regional eduroam provider (CEN)

2. Ensure Wi-Fi supports 802.1X and RADIUS.

3. Work with IT or local institutions for setup/testing.

4. Promote with signage and patron guides.

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Interested in learning more about eduroam?

- Visit Brad's eduroam workshop Thursday.

Q & A

ADDITIONAL HELP

- Questions, comments, concerns? Please email and ask! CENWi-Figrant@cteducation.net
- FAQs available on our webpage

IMPORTANT LINKS

- https://ctedunet.net/cWi-Fi/
- https://ctedunet.net/eduroam/
- https://eduroam.org/how/(how eduroam works at a high level)
- https://wiki.geant.org/display/H2eduroam (beginner to advanced technical how-to on how to configure eduroam networks)