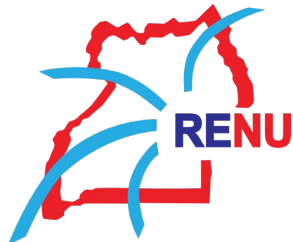


eduroam

22nd May, 2025

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Outline

- What is eduroam?
- How eduroam works
- Setting up eduroam
- RENU and eduroam
- eduroam challenges
- Connecting to eduroam
- Practical Session

What is eduroam

- eduroam (education roaming) is the secure, world-wide roaming access service
- Developed for the international research and education community



**Get Connected,
Wherever You are**



Why eduroam

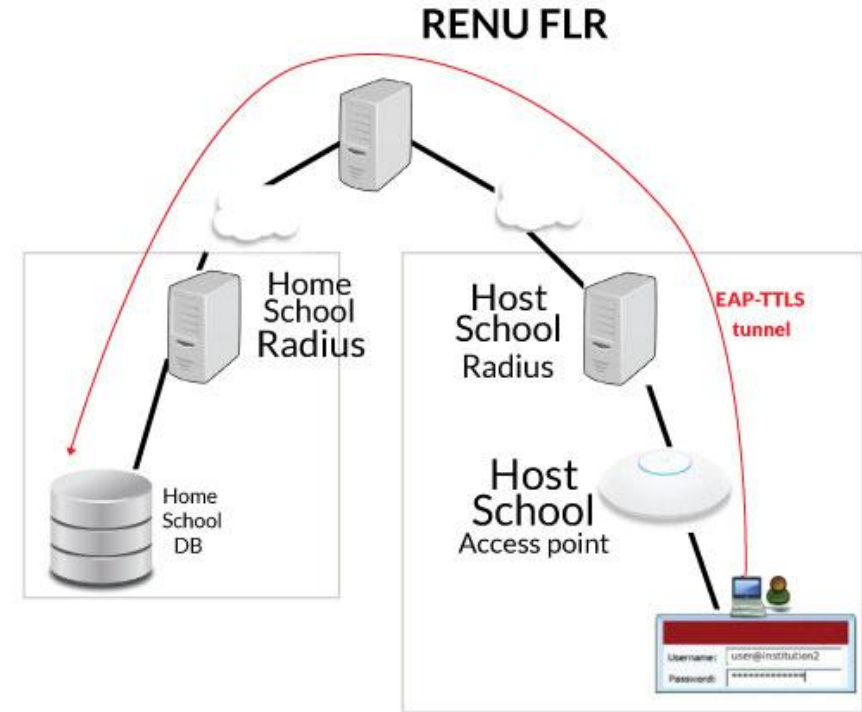
- **Global access:** Works in over 100 countries with thousands of schools/institutions.
- **Standard:** No need to rely on random local WiFi policies.
- Secure and instant connections



How does eduroam Work?



- Individuals use credentials provided at their home school.
- The home school RADIUS server does the authentication.
- The host school RADIUS server does the authorization



Requirements

- A RADIUS server
- Identity Server/User DB
- NREN member
- NRO
- Access Point(s)





eduroam Flavours

Outline

- On Campus eduroam
- Metro eduroam
- eduroam on the Go (OTG)
- HomeLinks

On Campus eduroam



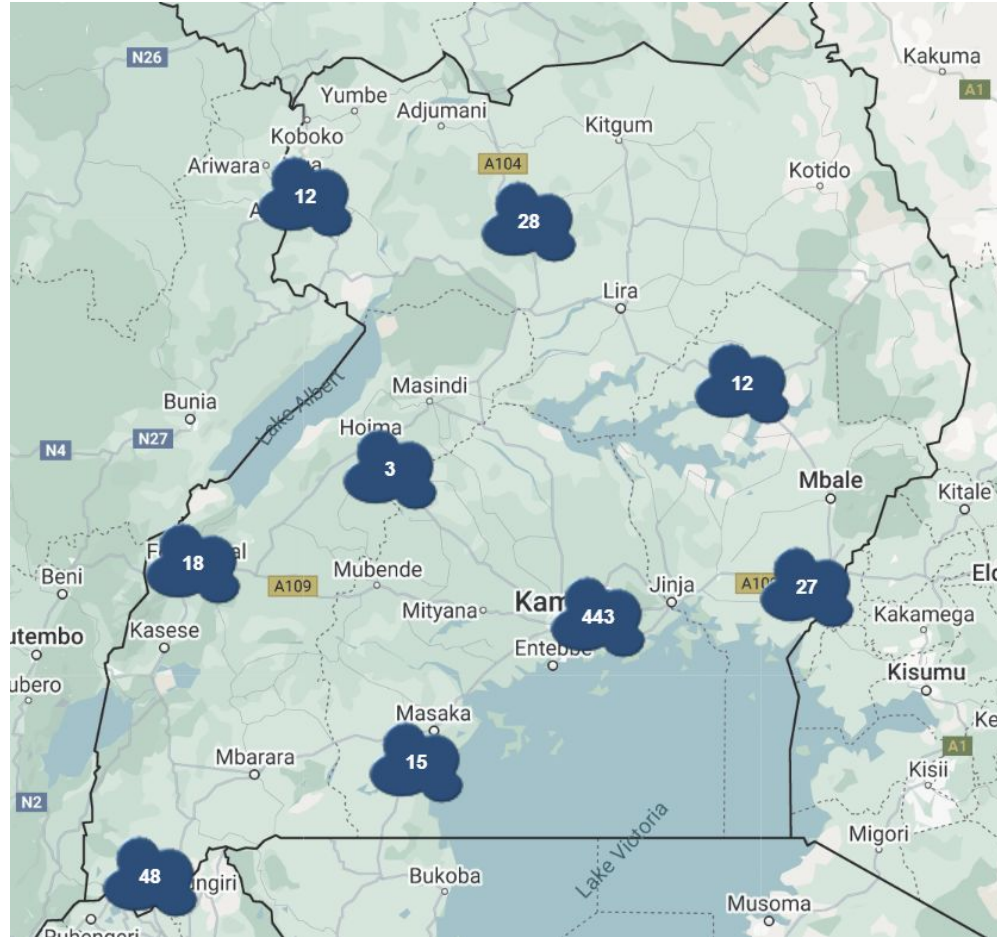
- Most Common deployment
- eduroam SSID is configured at the School Premises



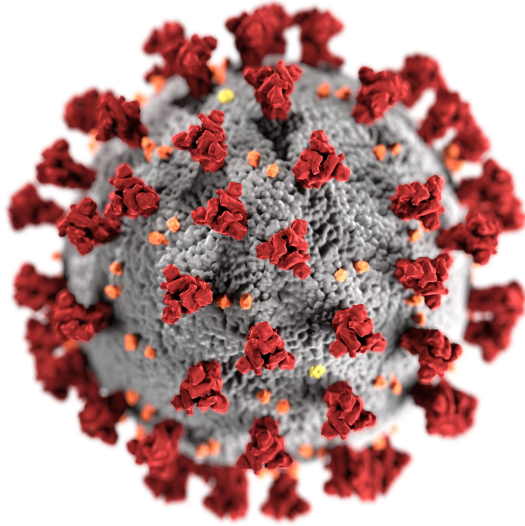
Metro eduroam

eduroam at the
Metropolitan areas.

- Bus parks
- Airports
- Hostels
- Libraries



Metro eduroam



Covid 19



RENU

HomeLinks



eduroam is
configured on
Home devices



eduroam on the Go

- Abbreviated as OTGs
- Pocket-size device



RENU and eduroam

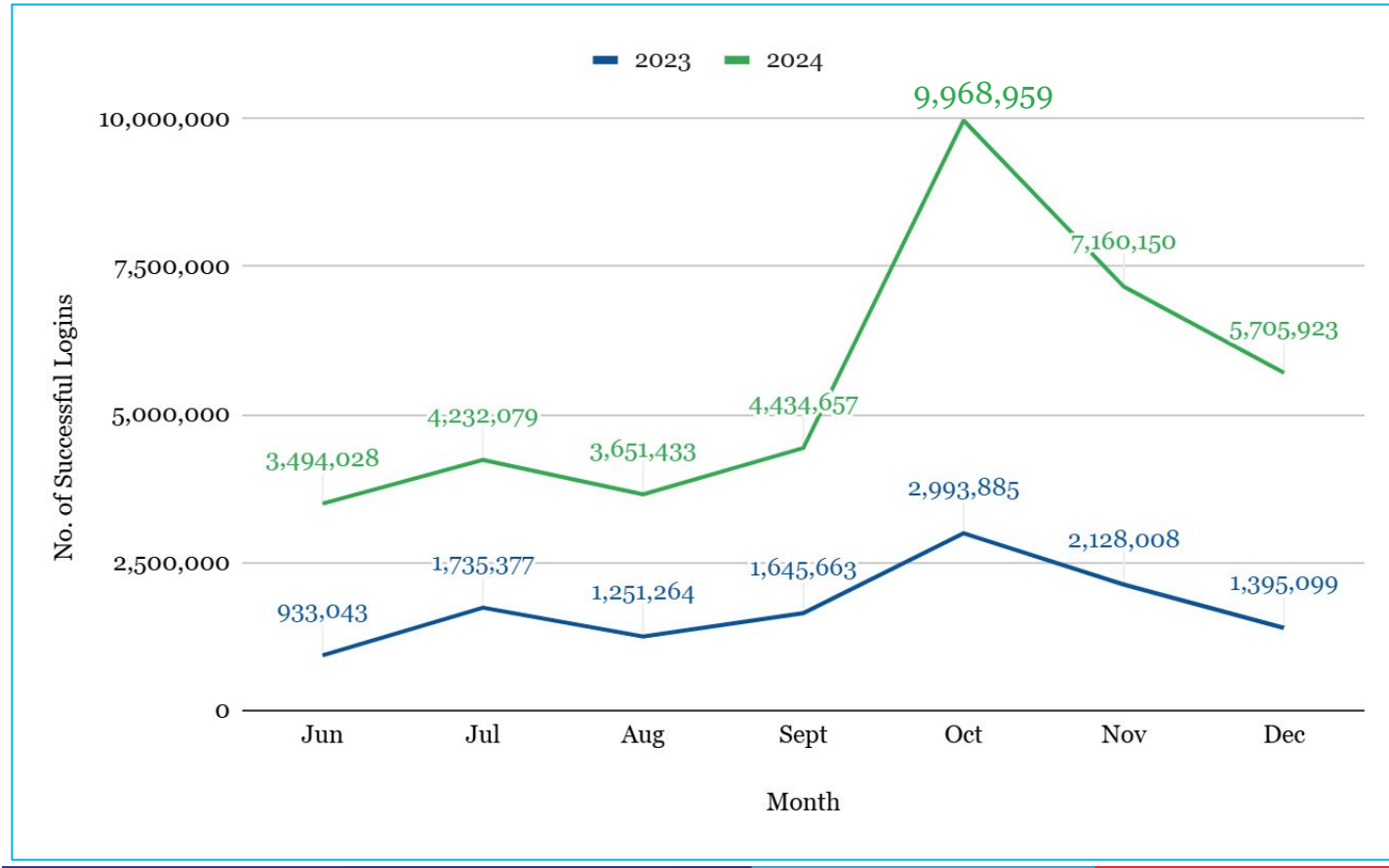
- National Roaming Operator (**NRO**) for eduroam in Uganda.
- Technical Support, Training and Capacity Building
- Developing solutions to address eduroam challenges



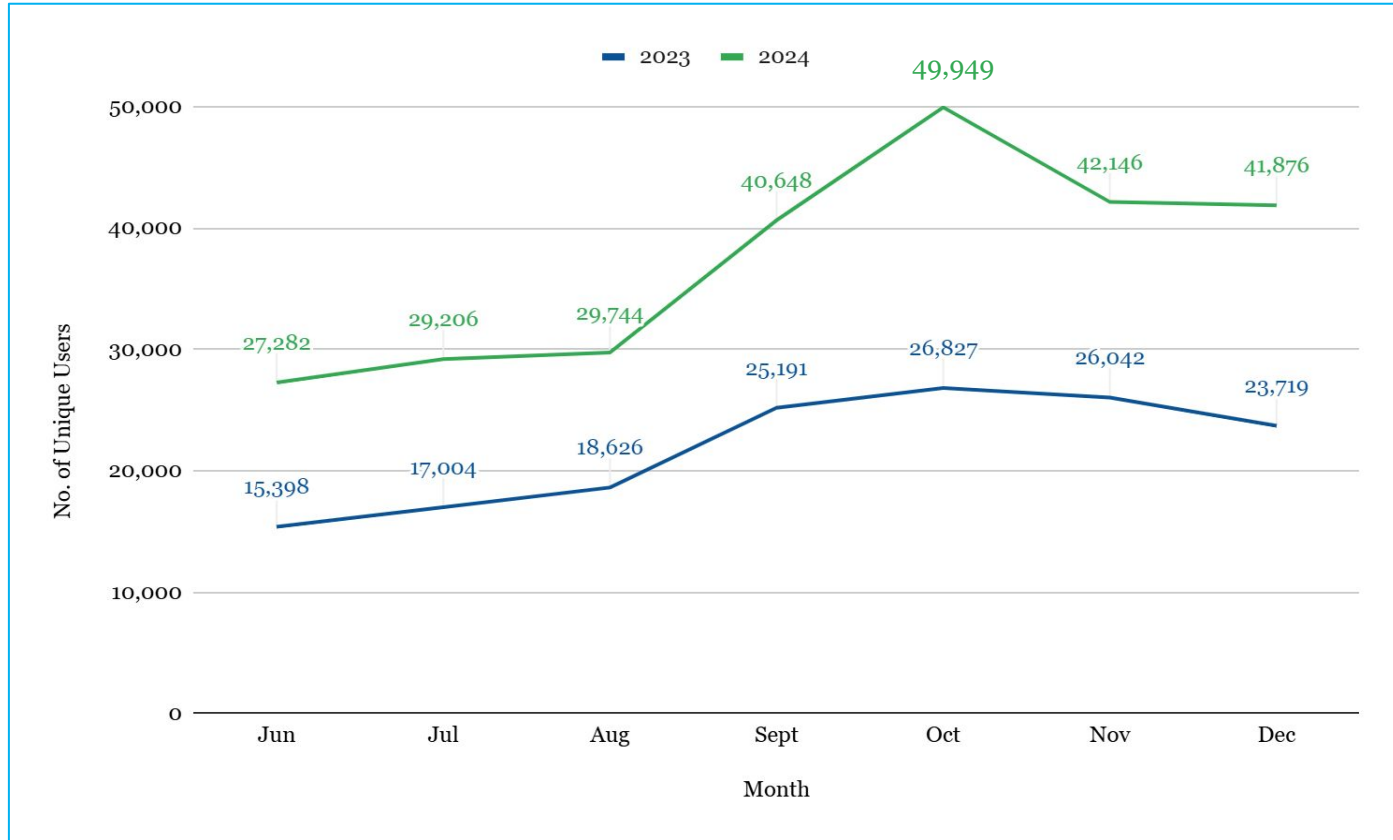
RENU and eduroam



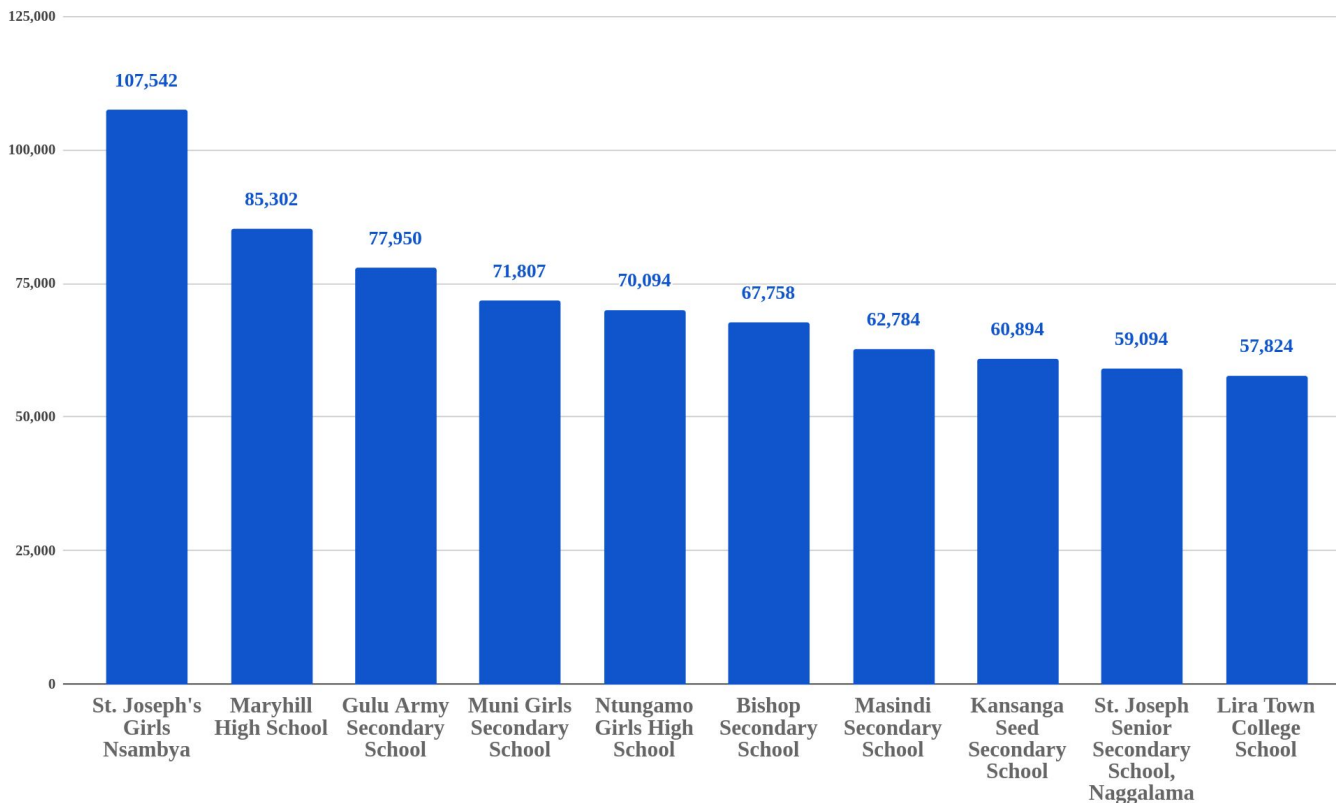
Successful Logins 2023 Vs 2024



Unique Users 2023 Vs 2024



2024 Successful Logins - Schools



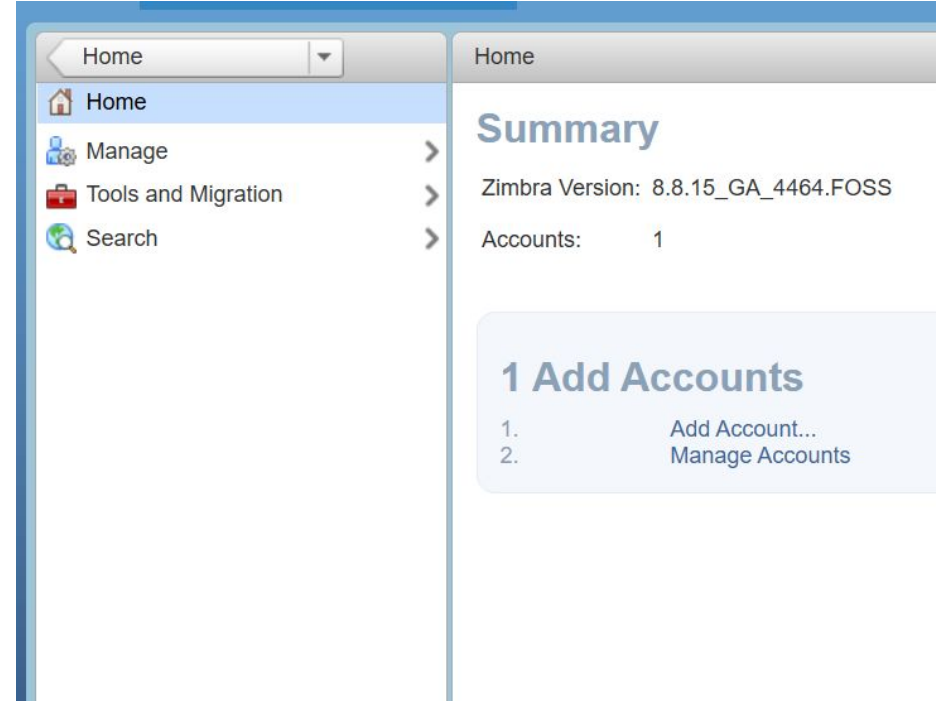
eduroam Challenges

- Lack of resources to deploy the service
 - Radius Servers
- Inadequate eduroam knowledge
- Lack of existing identity management



Managed IdP

- **Mainly Set up for Schools**
- No need to set up a User database and a Radius server.
- Web-based interface for managing users.



Connecting to eduroam



- Realm:
 - @renu.ac.ug
 - @guluhigh.ac.ug
 - @fms.lirauni.ac.ug
- Direct credentials
- geteduroam app

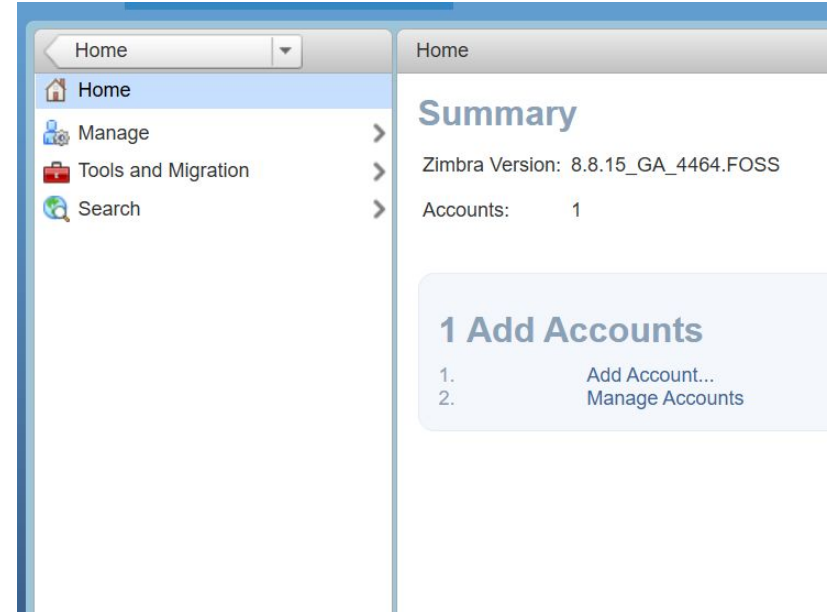


Common connection issues

- Wrong credentials
- Using gmail or outlook email addresses

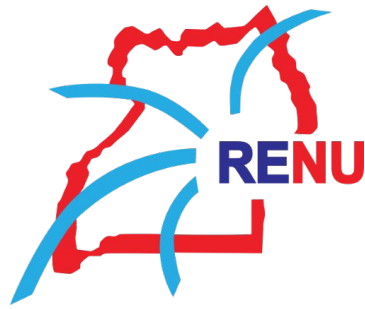
```
Access-Accept (response to Status-Server) from _self.  
message repeated 2 times: [ Access-Accept (response to  
Access-Reject for user 2000802162@student.ac station  
rator 1eduroam-metro.renu.ac.ug  
F-TICKS/eduroam/1.0#REALM=student.ac#VISCOUNTRY=UG#V  
cb98d13f#RESULT=FAIL#  
Access-Accept (response to Status-Server) from _self.  
message repeated 4 times: [ Access-Accept (response to
```

Managing users in managed IdP - Practical Session



Connecting to eduroam - Practical Session





THE END

Discussion