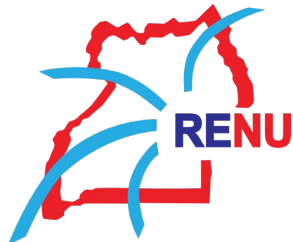


# Schools Workshop

8<sup>th</sup> May, 2025

Presented By: Ayesigye Derrick



## 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

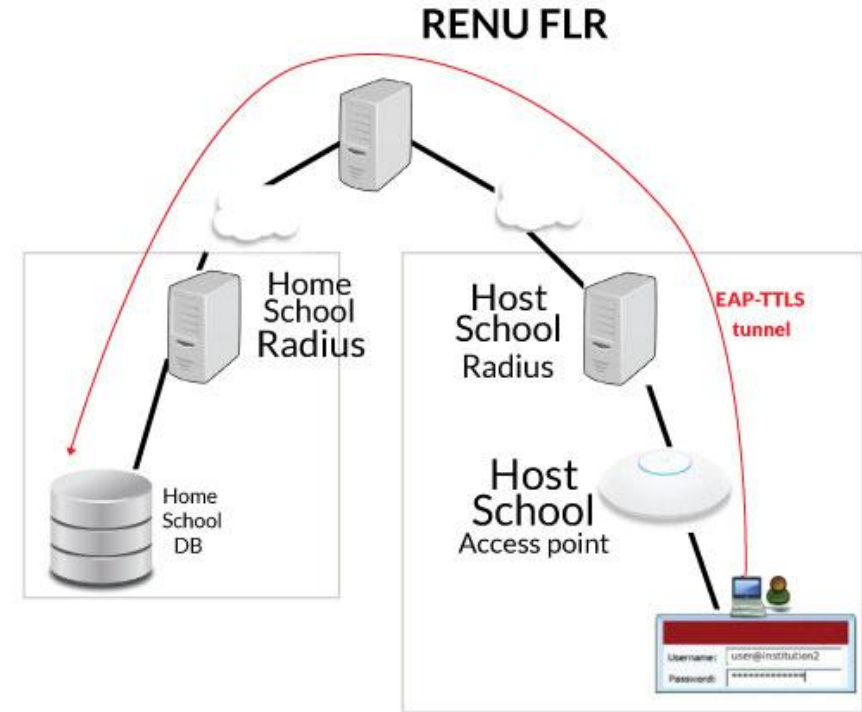
- **Global access:** Works in over 100 countries with thousands of schools/institutions.
- **Standard:** No need to rely on random local WiFi policies.
- Secure and instant connections



# 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

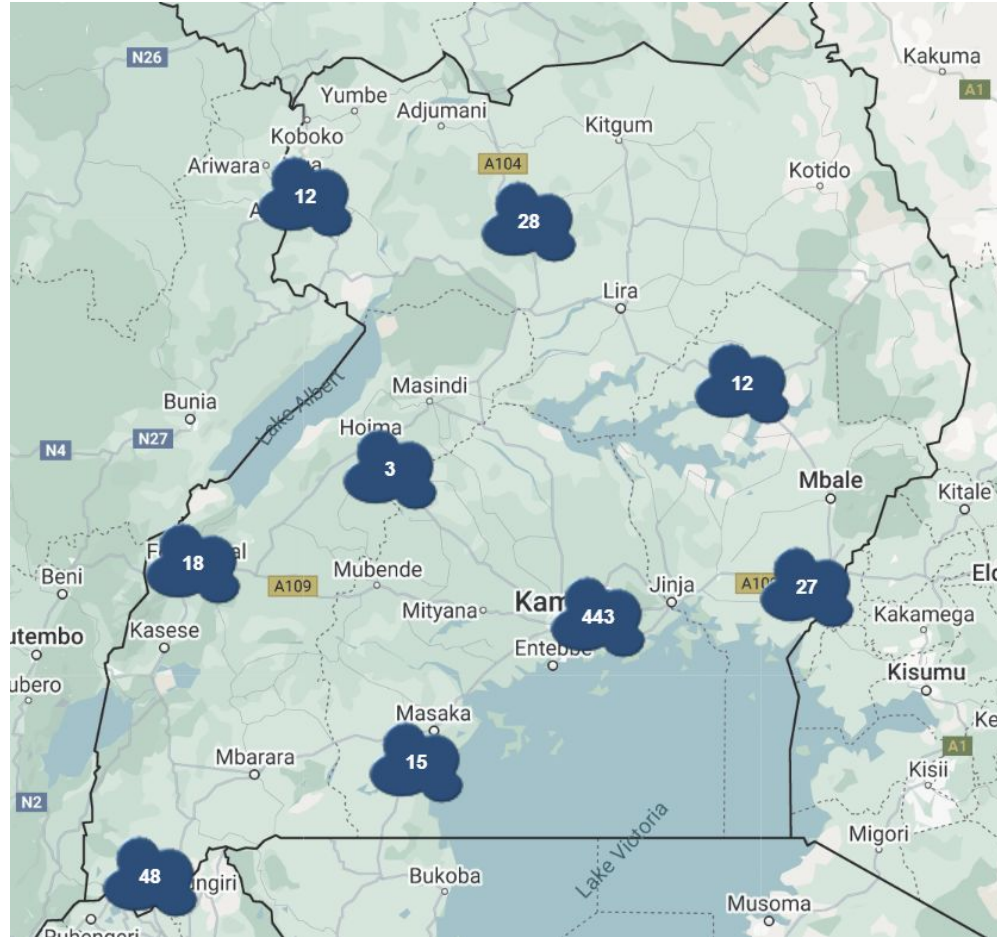




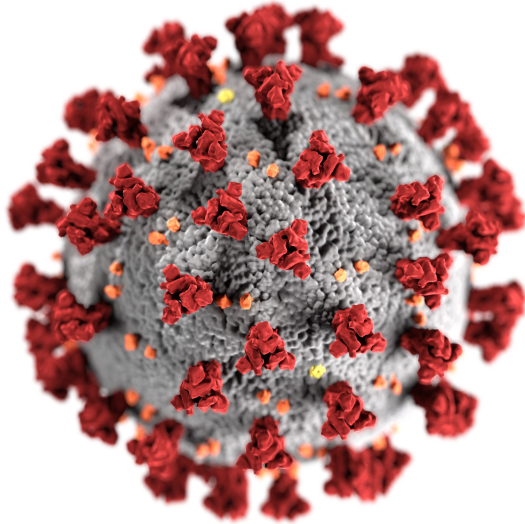
# Metro eduroam

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

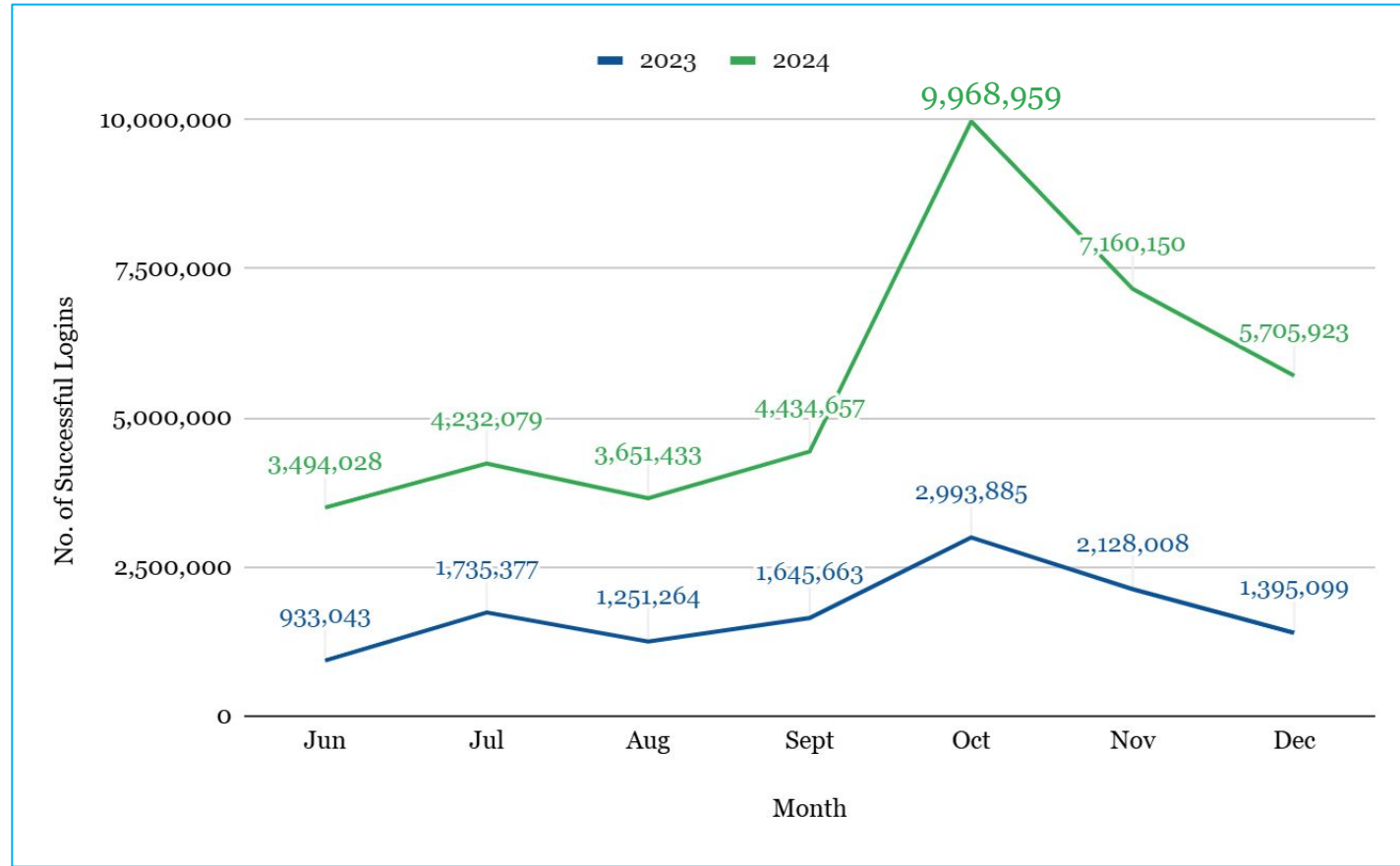




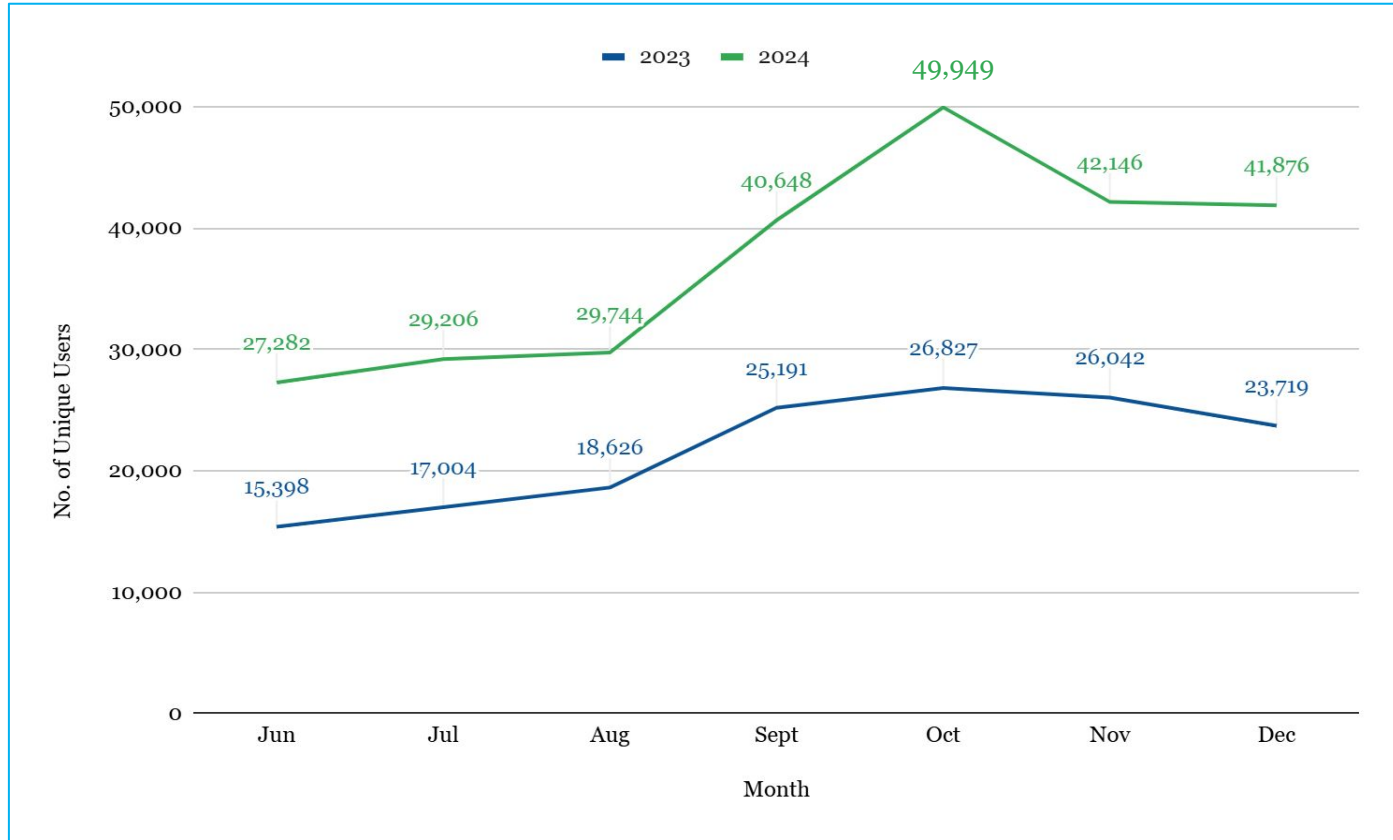
# RENU and eduroam



# Successful Logins 2023 Vs 2024

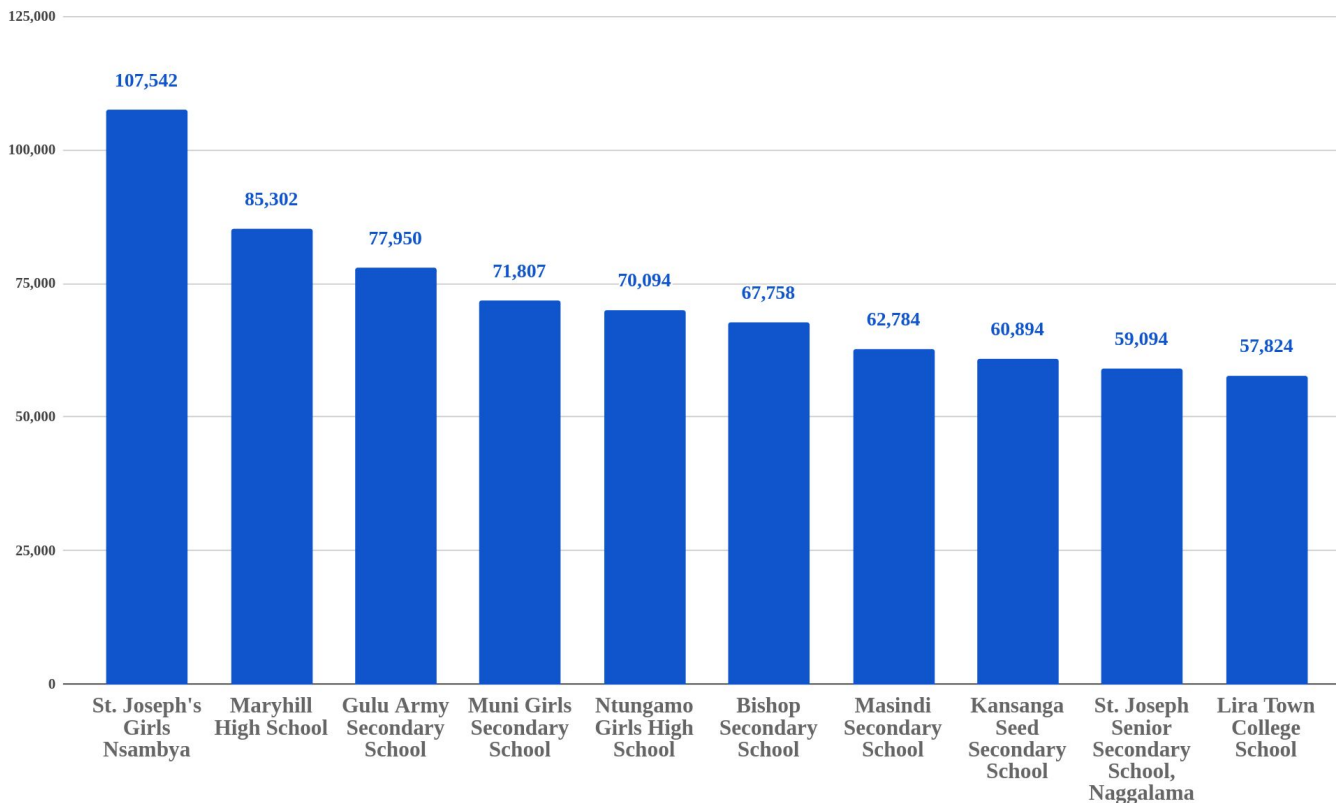


# Unique Users 2023 Vs 2024





# 2024 Successful Logins - Schools



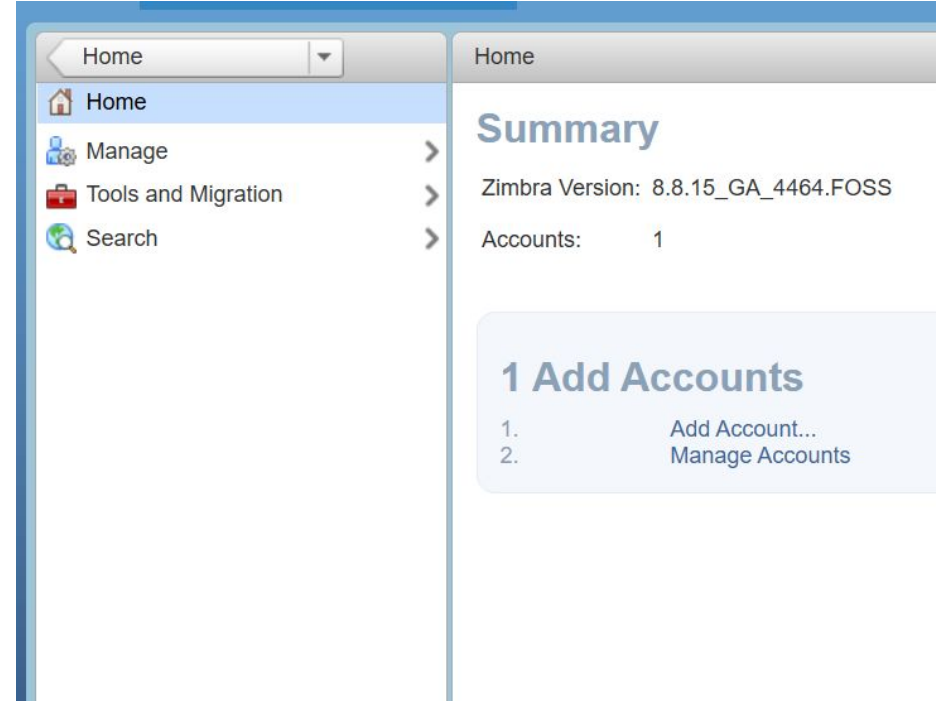
# eduroam Challenges

- 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
- Direct credentials
- geteduroam app

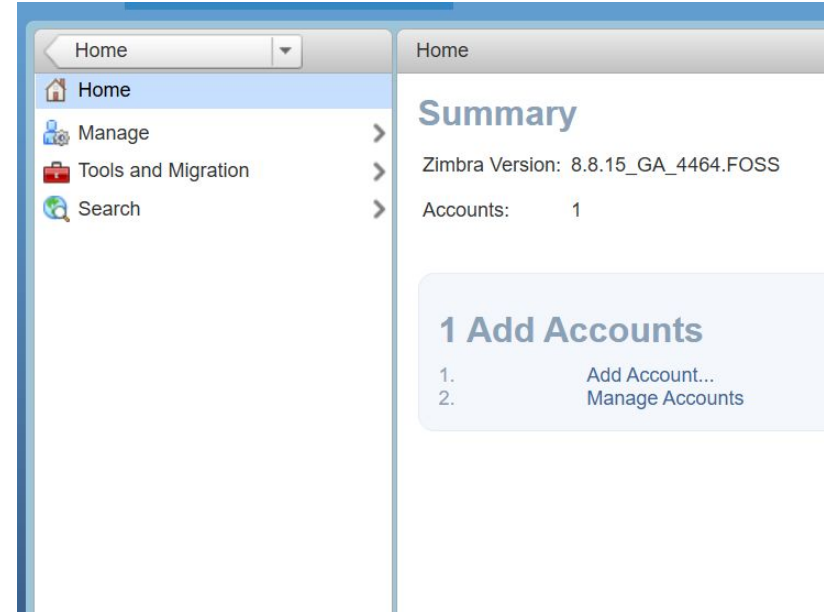


# Common connection issues

- Wrong credentials
- Using gmail or outlook email addresses

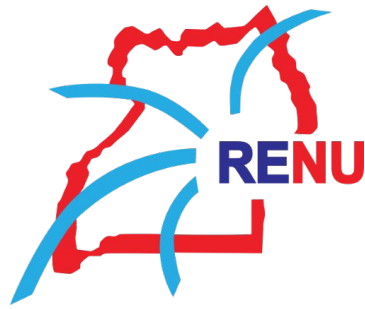
```
Access-Accept (response to Status-Server) from _self.  
message repeated 2 times: [ Access-Accept (response to  
Access-Reject for user 2000802162@student.ac station  
rator 1eduroam-metro.renu.ac.ug  
F-TICKS/eduroam/1.0#REALM=student.ac#VISCOUNTRY=UG#V  
cb98d13f#RESULT=FAIL#  
Access-Accept (response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