

# RENU Metro eduroam version 2.0 -TUSIMBUDE

Roaming Through

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14.00 - 15.30 | Room C

THURSDAY, 16<sup>TH</sup> JUNE 2022

# Presentation Outline

- History
- Why Metro eduroam
- Metro eduroam deployment
- Traffic and user profiles
- Benefits and Challenges
- The Future



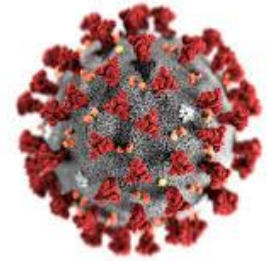
## RENU eduroam - History

- RENU - 75<sup>th</sup> National Roaming Operator (NRO) in Jan 2016.
- 18 Institutions on eduroam - Between Jan. 2016 to Oct. 2020.
- 22 Institutions on eduroam – From Oct. 2020 – May 2022.
- Strategies to increase uptake (before Oct. 2020):-
  - Direct Engineering Assistance.
  - Workshops in-country and out of the country.
  - Formation of Core Engineering Team.

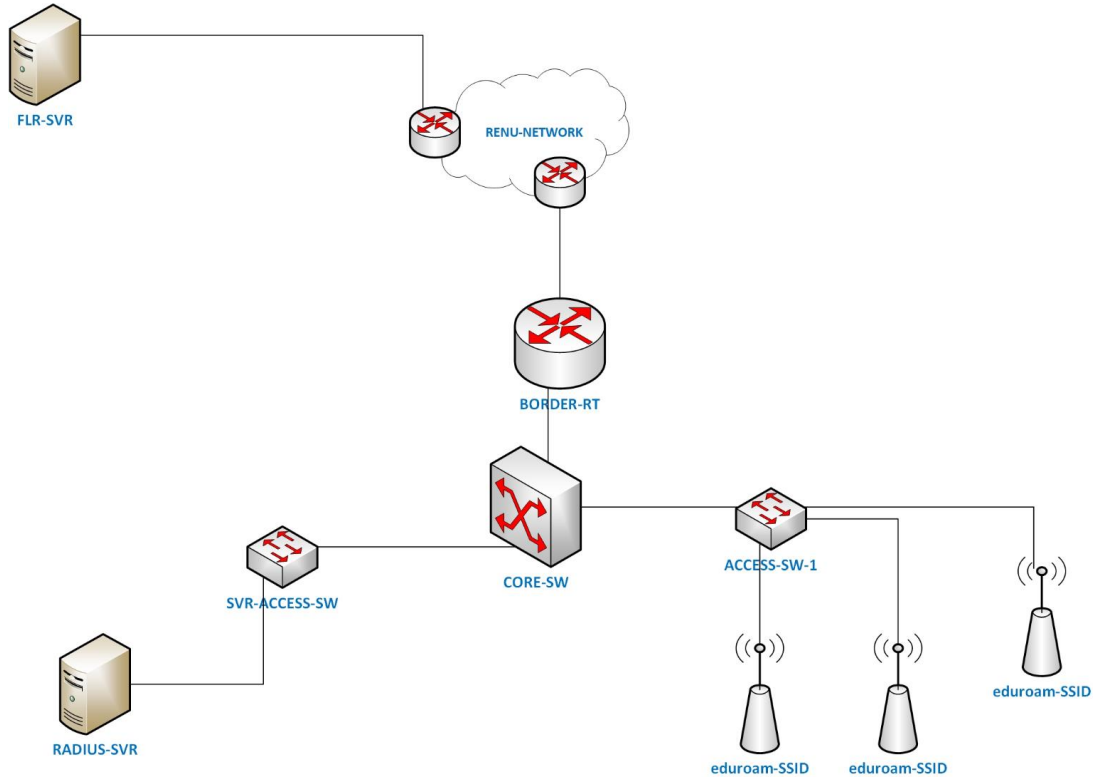


## Why Metro eduroam?

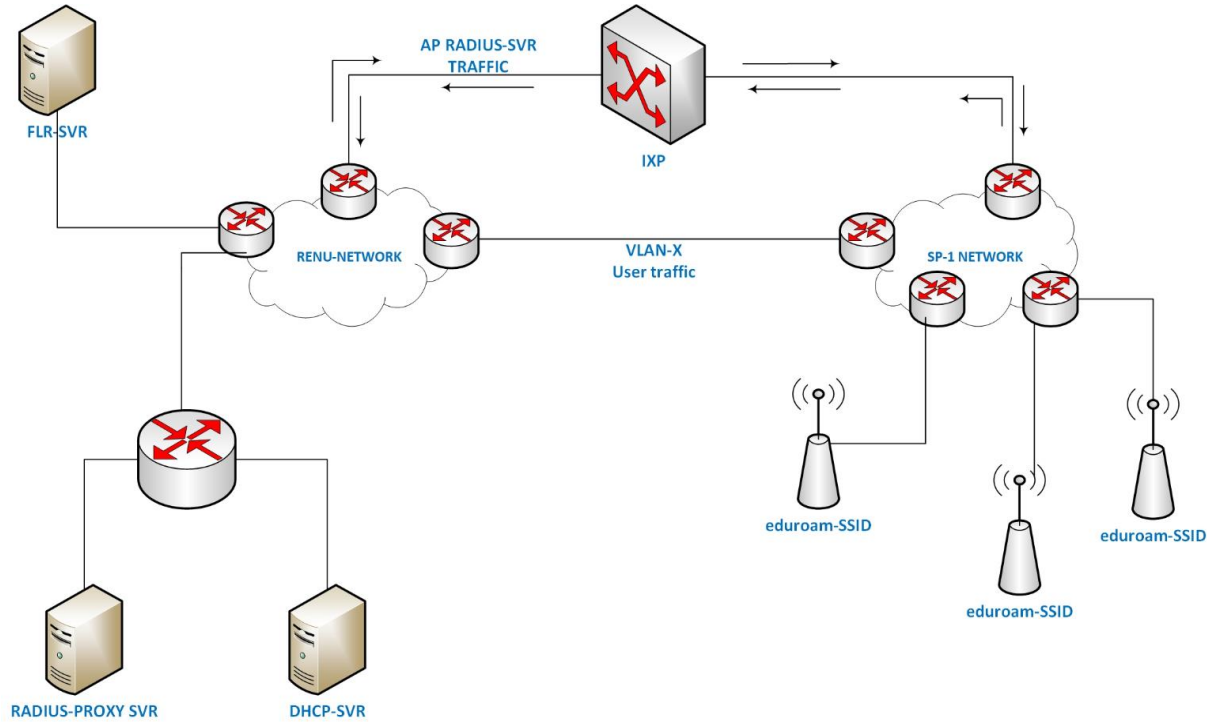
- eduroam locked inside Campus Network.
- Metro eduroam breaks the boundaries.
- In-country lock-down boosted Metro eduroam need.
- Deployment strategies:-
  - Leverage existing metro wireless deployments.
  - Institutional staff residences.
  - Managed IdP service – smaller institutions.



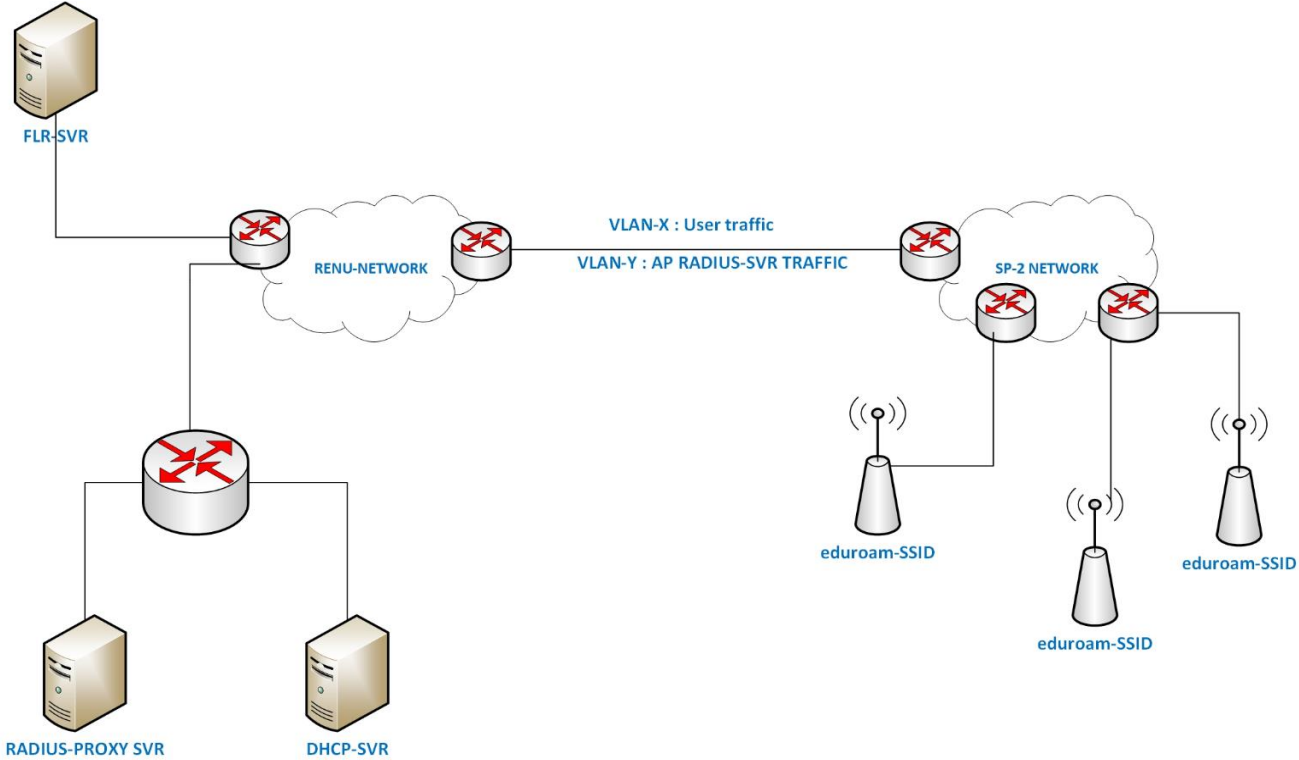
# Campus eduroam Setup



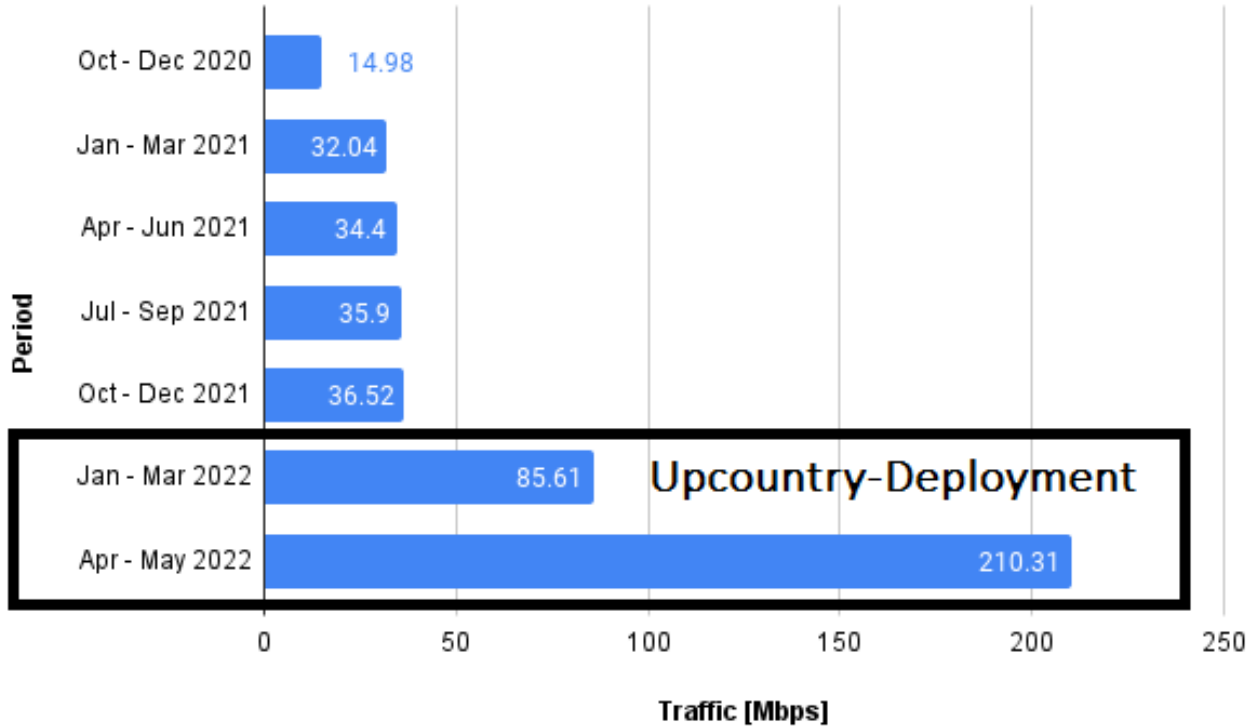
# Metro eduroam deployment – Setup - 1



# Metro eduroam deployment – Setup - 2

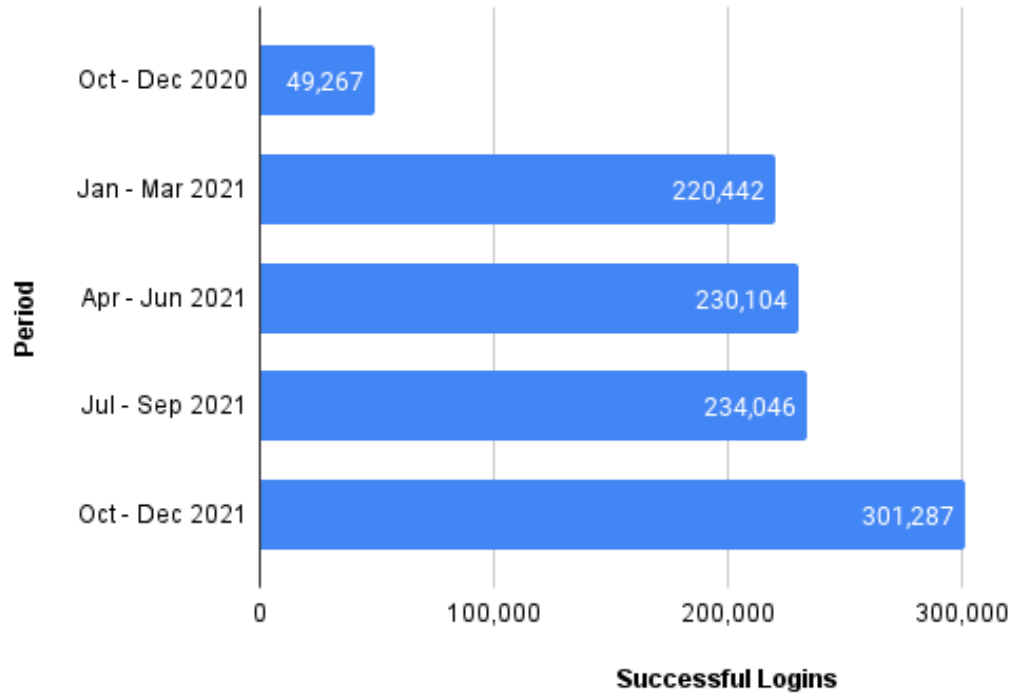


# Traffic and user profiles – Metro eduroam

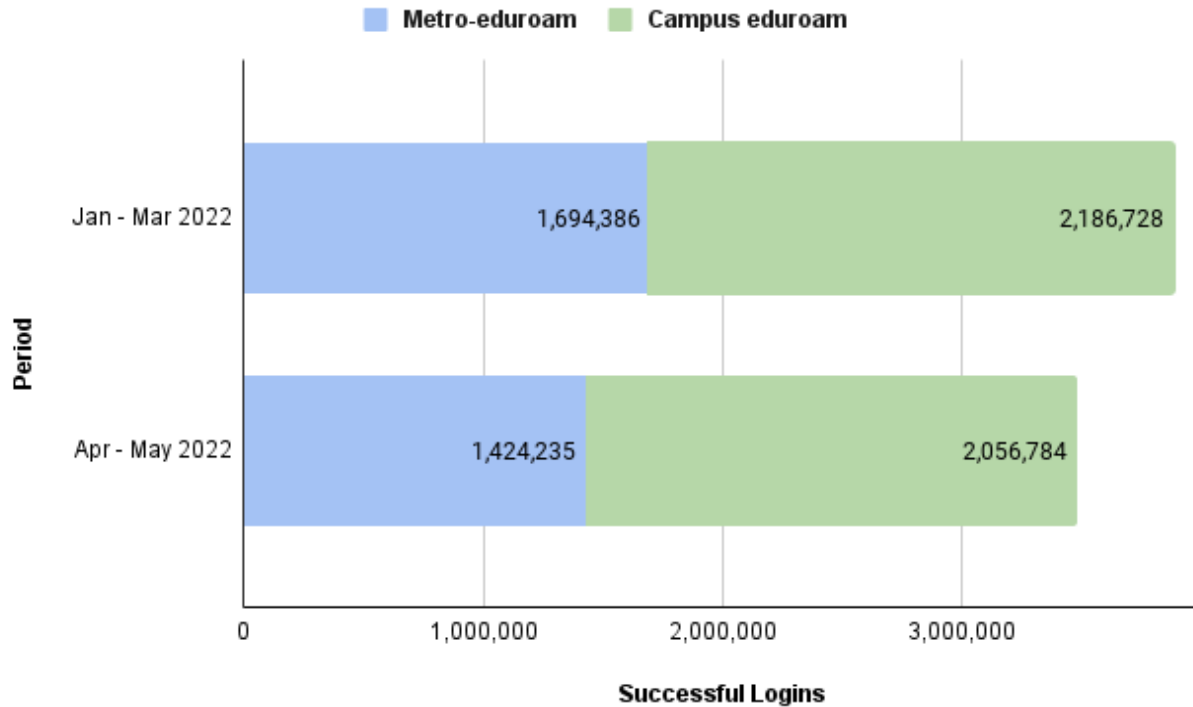




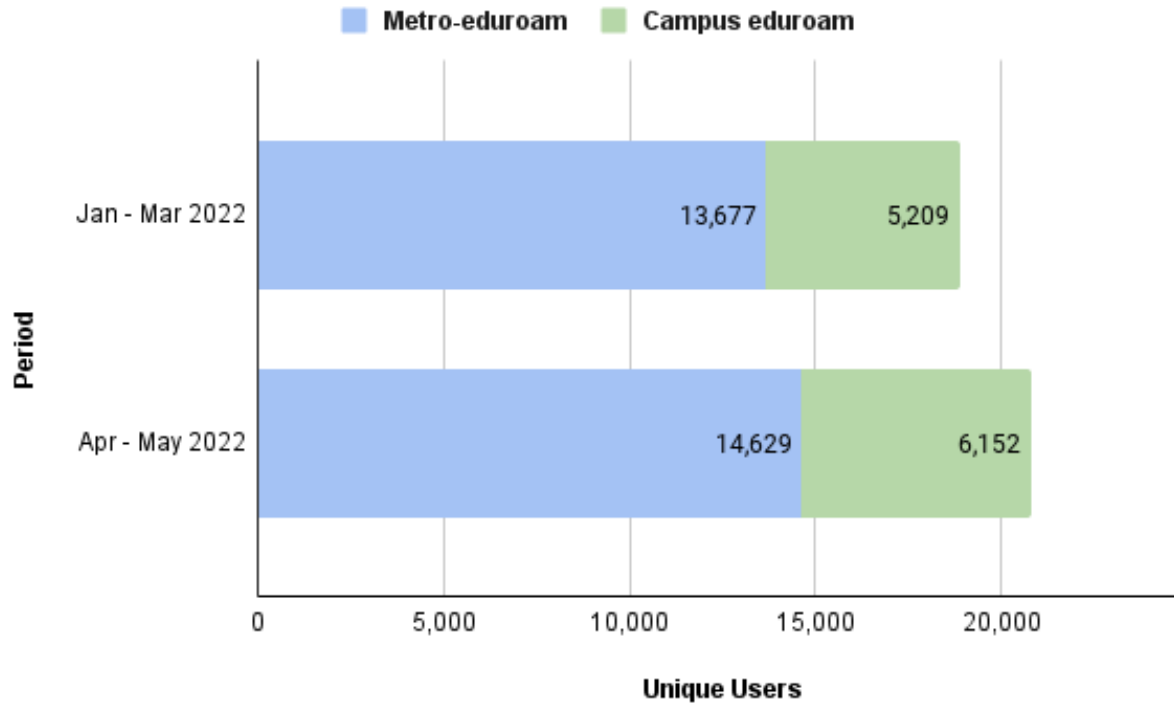
## Traffic and user profiles – Metro eduroam



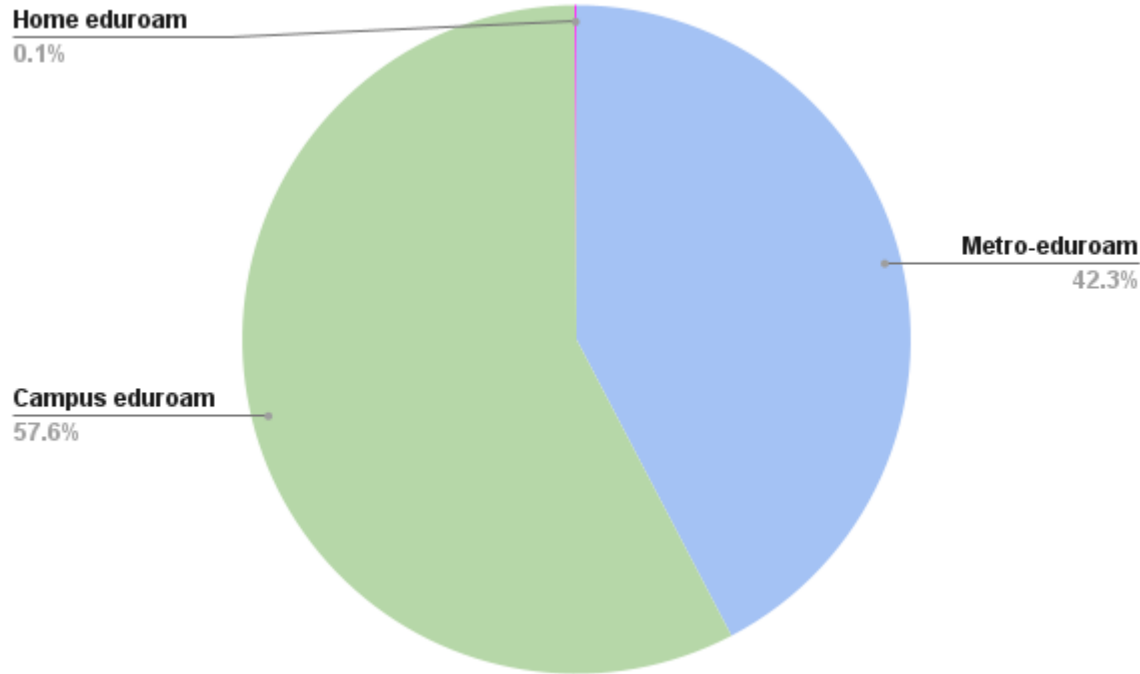
# Traffic and user profiles – Metro Vs Campus eduroam



# Traffic and user profiles – Metro Vs Campus eduroam



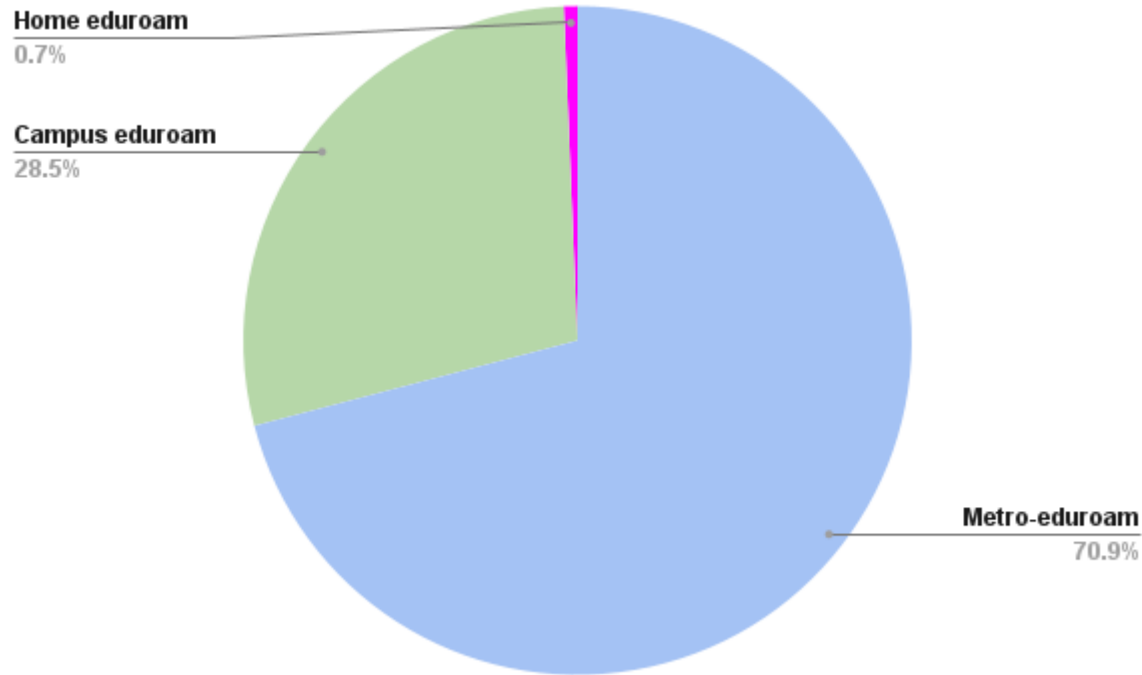
# Traffic and user profiles – Metro Vs Campus Vs Home eduroam



Successful Logins  
Jan – May 2022



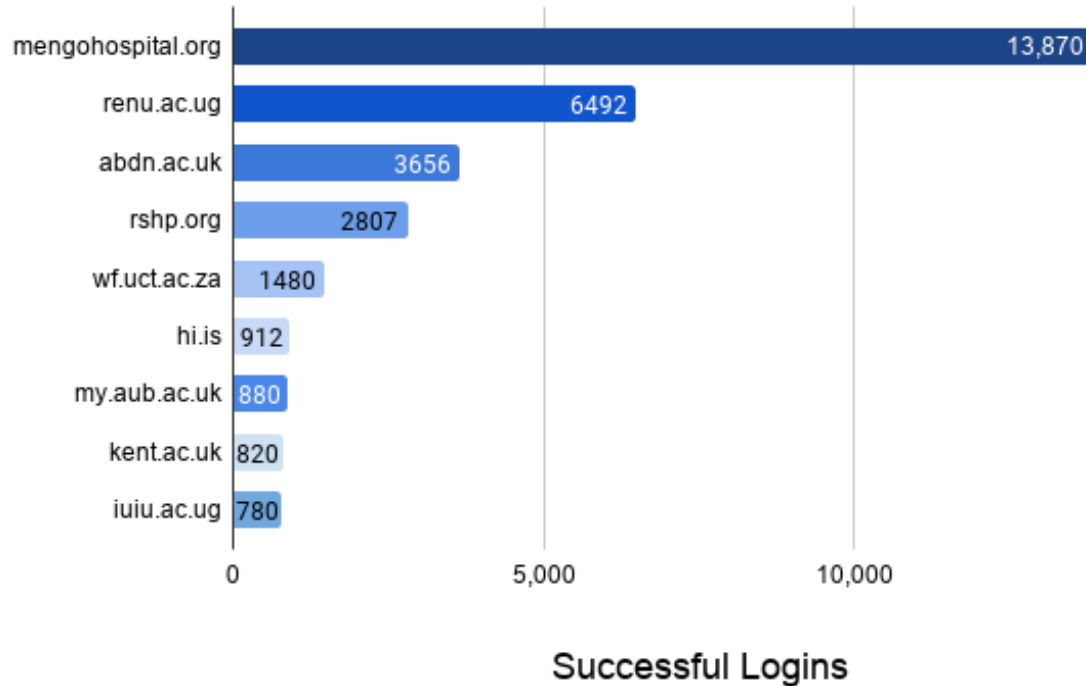
# Traffic and user profiles – Metro Vs Campus Vs Home eduroam



Unique Users  
Jan – May 2022

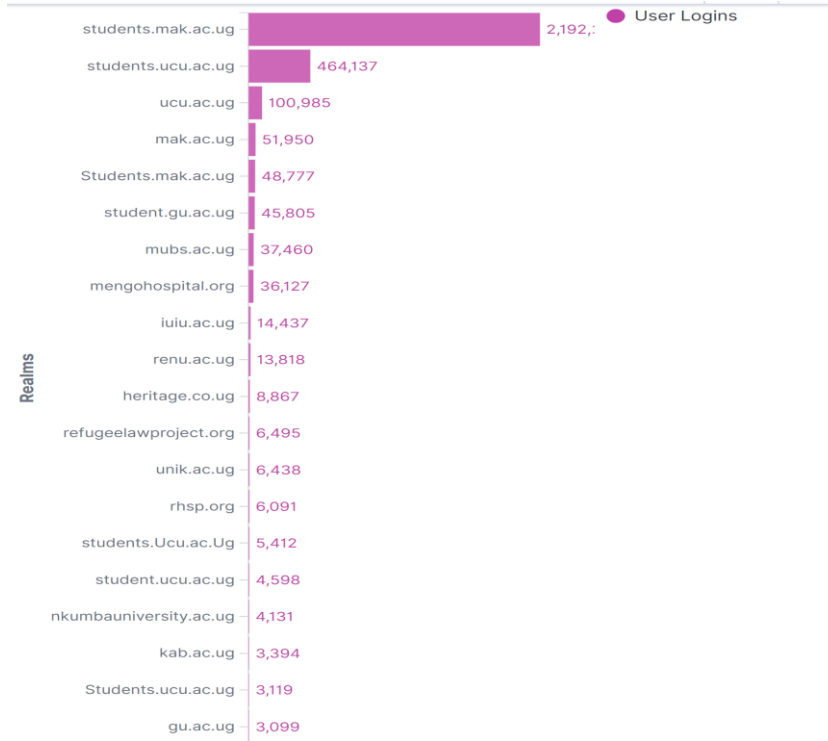


## Traffic and user profiles – Metro eduroam



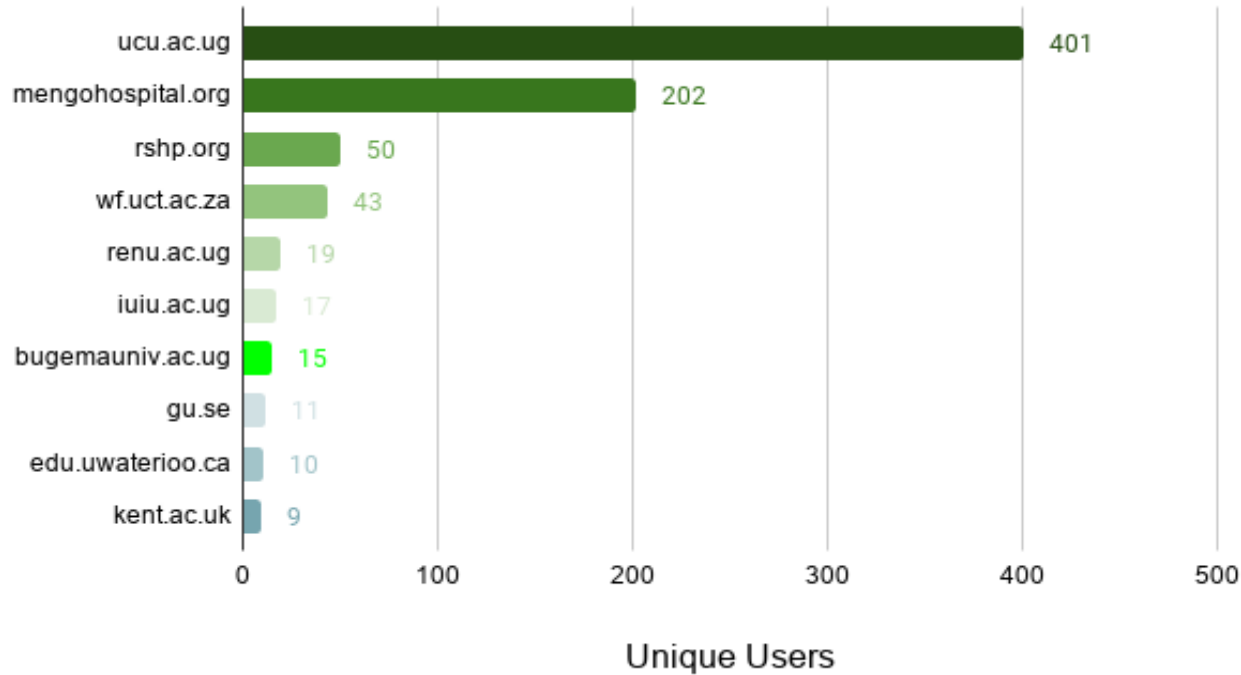
In February 2021

# Traffic and user profiles – Metro eduroam



In May 2022  
Successful Logins

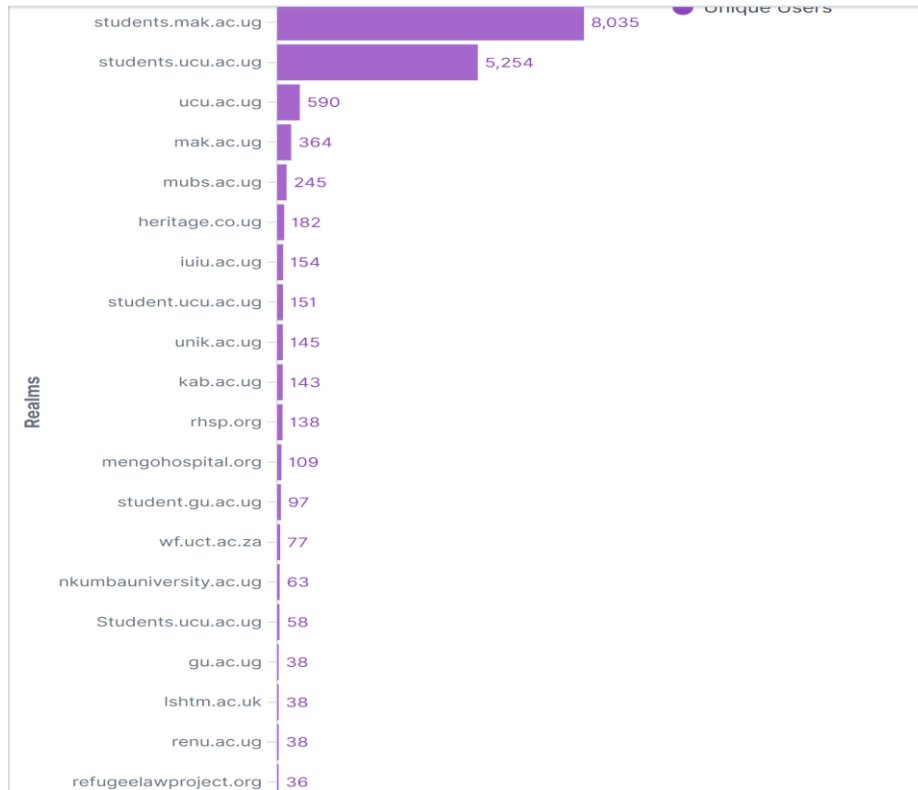
# Traffic and user profiles – Metro eduroam



In February 2021



# Traffic and user profiles – Metro eduroam



In May 2022  
Unique Users



## Benefits of Metro eduroam

- Increased demand for the eduroam service.
- Extension of NREN free connectivity service.
- Growing Institutional and Government trust in the NREN.
- Growing NREN membership.
- Increased public interest and partnerships.
- Distinction between an NREN and ISP.



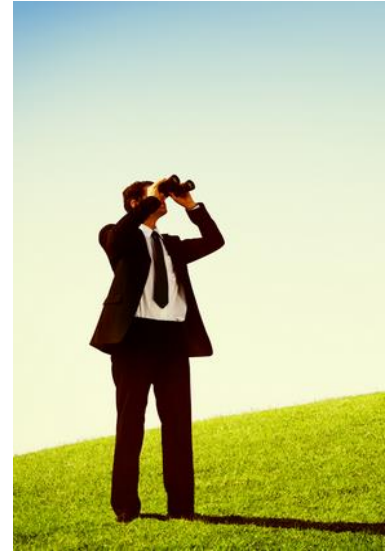
# Challenges

- Difficulty to measure or monitor Quality of service. WifiMon Challenges
- Access Point locations – No control by NREN + “Meaningful Spots”.
- Service Provider pricing model – Data Volumes vs User Sessions.
- Financial sustainability - growing bandwidth – NREN side.
- Sustainability – support + growing bandwidth – Campus side.

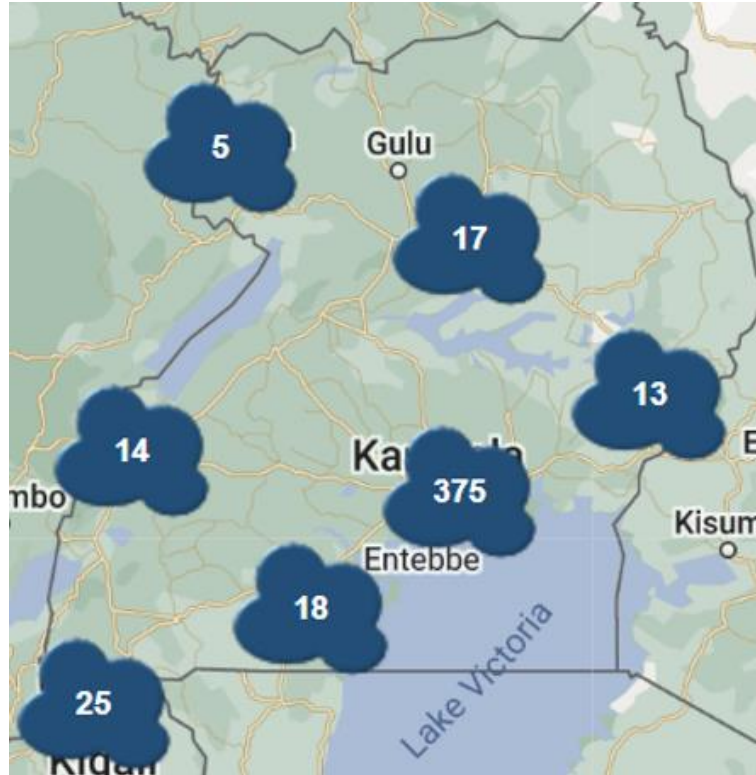


## The Future

- Increase the number of eduroam hotspots.
- Enlist other service providers.
- WifiMon using hardware probes.



## RENU – eduroam Map



Visit: <https://eduroam.renu.ac.ug/>



Visit to get more information

<https://cloud.renu.ac.ug/index.php/s/HBmxKAKByd9GP4D#pdfviewer>

<https://www.youtube.com/watch?v=kpyji4Q-bPg&t=17s>

<https://cloud.renu.ac.ug/index.php/s/HBmxKAKByd9GP4D#pdfviewer>

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# Thank you

## Any Questions?

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