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Basic Research Services for Researcher Collaboration

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Half Day Research Infrastructure Forum - May 18, 2016

At Safari Park Hotel

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1. eduroam

Transforming education through ICT

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What are you accessing online?

- Email (work & personal)
- Social media
- Research Infrastructures

What is eduroam?

- eduroam (**edu**cation **roam**ing) is the secure, world-wide roaming access service developed for the international research and education community.

- eduroam allows students, researchers and staff from participating institutions to obtain Internet connectivity across campus and when visiting other participating institutions by simply opening their laptop

Source: www.eduroam.org

Advantages of eduroam

- Roaming of researchers to different institutions
- Enhanced security: encrypted communication via wirele
- Availability within Kenya worldwide

Where is eduroam?

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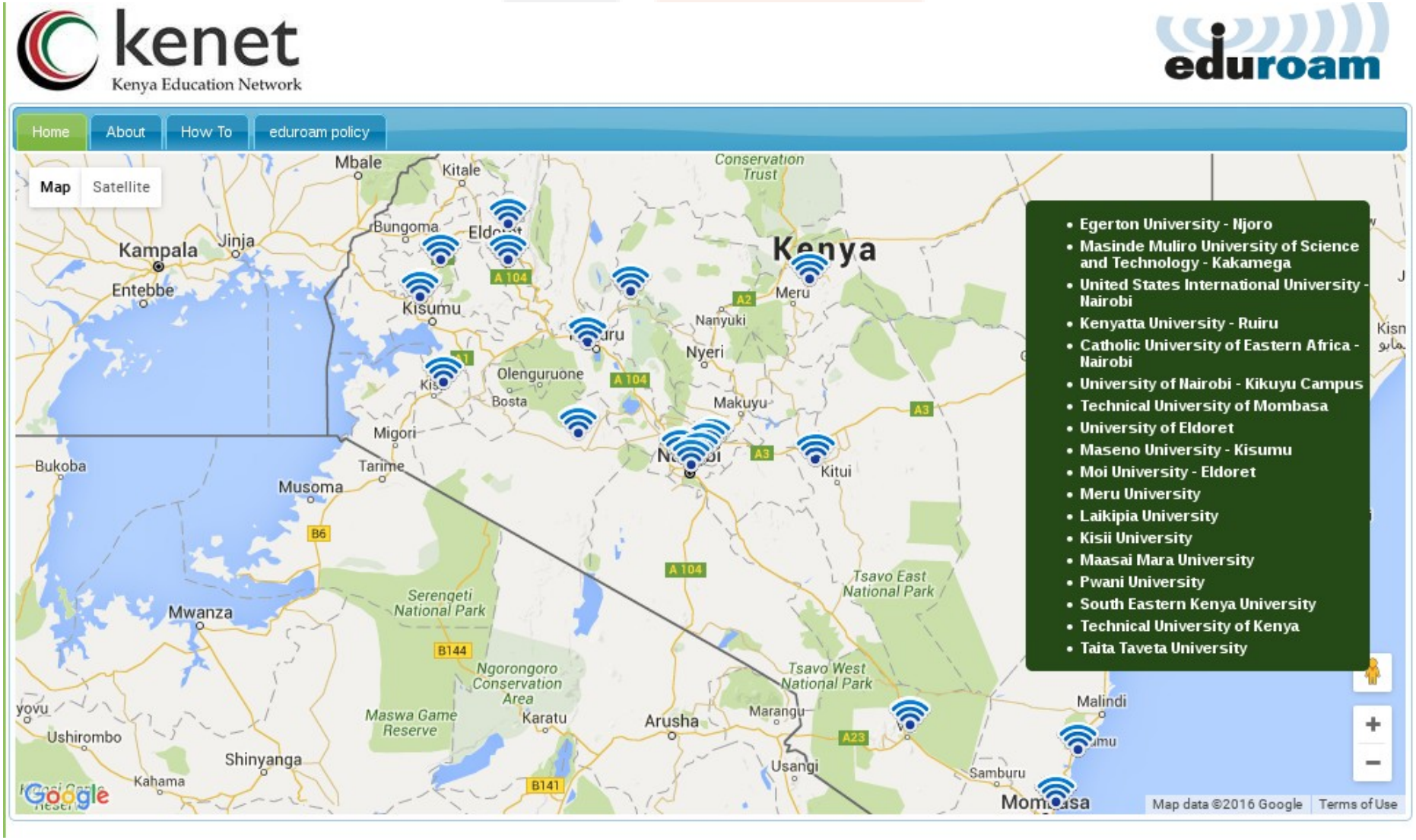
www.eduroam.ac.ke



www.eduroam.org

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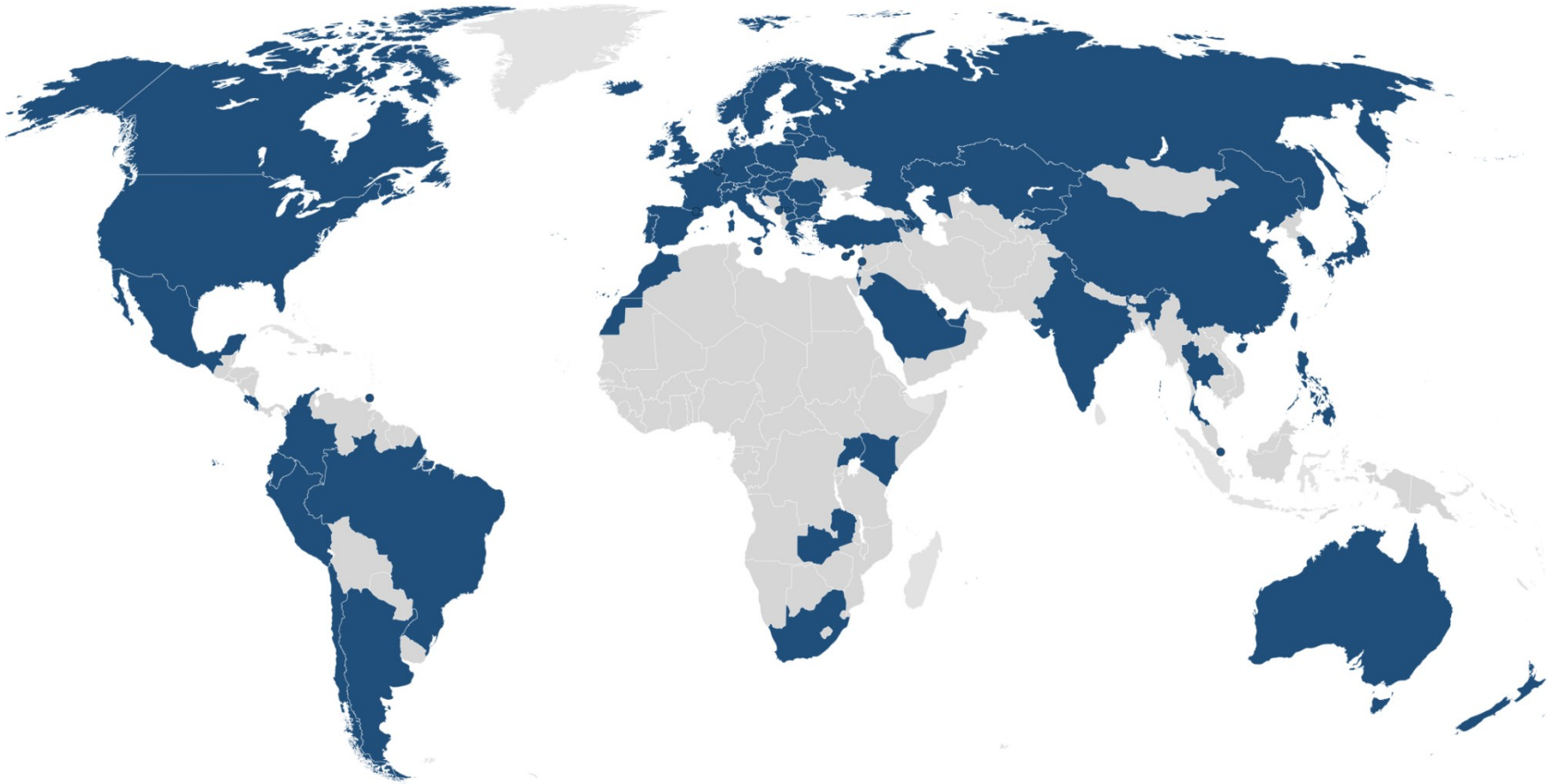

Having started in Europe, eduroam has gained momentum throughout the research and education community world wide and is now available in 76 territories world wide.

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2. web/video conferencing

Conferencing Service

- Web Conferencing: Browser access
- Video Conferencing
  - Polycom Units in 5 PoPS
  - Product based: Vidyo
    - Software based

Web Conferencing Advantages

- Setup online class
- Can access on your laptop or mobile device
- No need to travel to meet; meet online from different locations
- Record sessions for future reference

Web Conferencing

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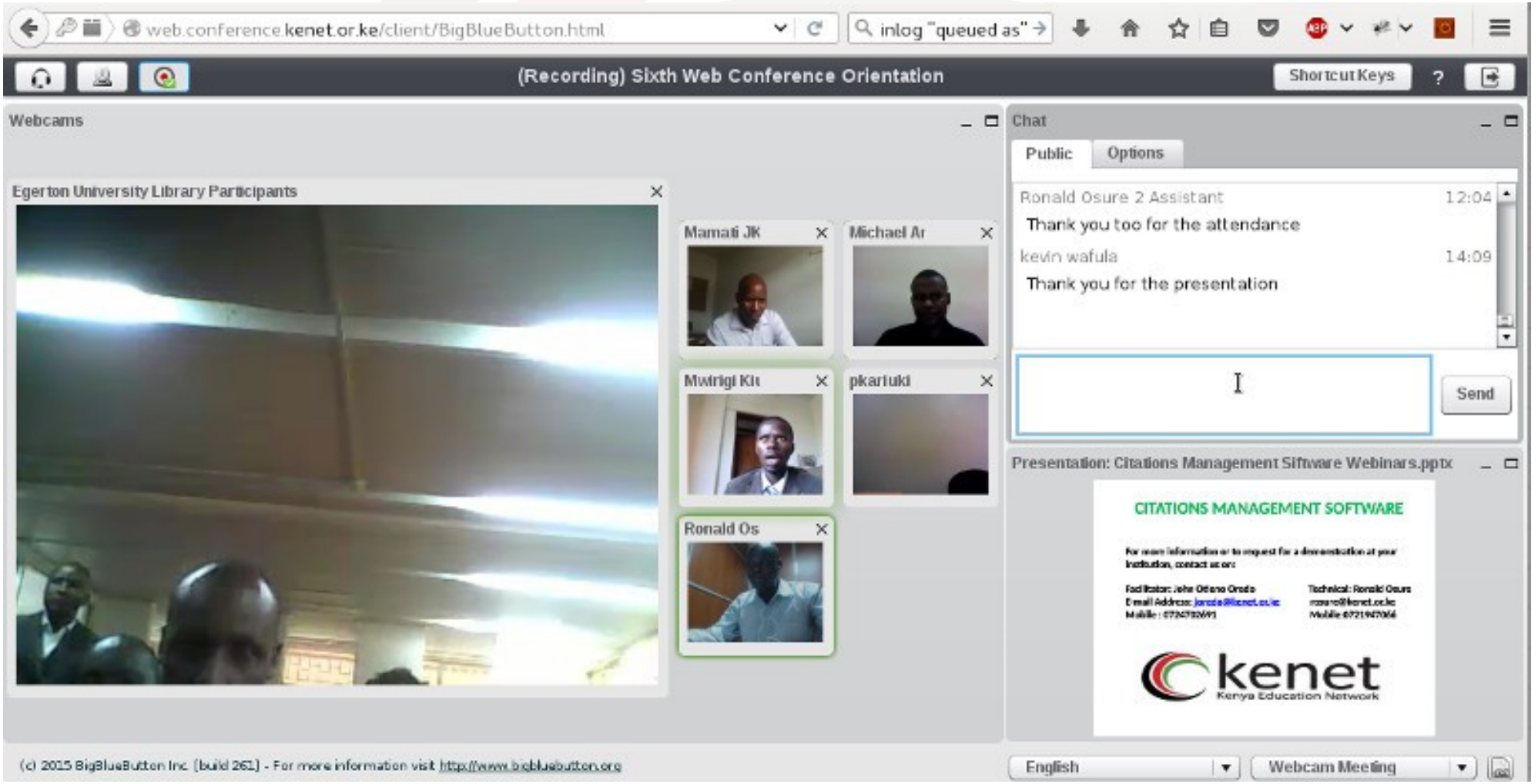

Live Demo of this workshop's streaming…

- URL: https://conference.kenet.or.ke/einfrastrucures-forum/
- Room password: 'research'

How to register

- URL → https://conference.kenet.or.ke
- Sign-up is online
- Manual account activation

Video Conferencing

- Product based ie Polycom hardware setup
  - Across 6 PoPs in Kenya (Mombasa, Nairobi, Nakuru, Eldoret & Maseno)
- Software based → Vidyo
  - Desktop based software application

Vidyo

- Software based: Install required software
- Can be accessed on laptop, mobile devices
- Setup online class
- Can access on your laptop or mobile device
- No need to travel to meet; meet online from different locations
- Record sessions for future reference

Vidyo Sample Quality

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Interested in Web or Vidyo?

- Send an email to support@kenet.or.ke

3. Community Cloud Services (Servers & Storage)

KENET Data Center Services

- KENET operates two secure data centers at USIU and at UoN
  - ✓ Tier 3 data centers
  - ✓ Both are located at network hubs with 10 Gb/s ring interconnection
  - ✓ 4 power sources per data center; 5 fiber cables per data center

KENET Data Center Services

- Virtualization: offers great choice of customization and flexibility for universities or researchers who want to host online applications and systems, research projects data, websites or even repositories.
- Co-location: Involves bringing physical servers to be hosted at the KENET data centers
- Disaster Recovery: Could either be a virtualization or co-location

KENET Data Center Services

NO.	Description	Base
1	2.9Ghz vCPU	1
	RAM (GB)	2
	Hard Disk (GB)	100
	Cost Per Month	**$40**
2	2.9Ghz vCPU	2
	RAM (GB)	4
	Hard Disk (GB)	200
	Cost Per Month	**$75**
3	2.9Ghz vCPU	4
	RAM (GB)	8
	Hard Disk (GB)	500
	Cost Per Month	**$140**

KENET CERT

•The KENET CERT is a team within KENET formed to study Internet security, discover vulnerabilities, and to provide assistance on security matters to the KENET community.
•It strives for a safer, stronger Internet for the education and research community in Kenya by:-
– Responding to major incidents
– Analyzing threats
– Exchanging critical cyber security information within the community and also with other CERTs

Hacked website

KENET CERT Services

- Facilitate the centralized reporting of incidents
- Perform Cyber Security training and raise the security awareness of users
- Resolving security related tickets as part of the KENET helpdesk
- Promote computer security policies within the KENET community by creating policies such as the web hosting policy, business continuity plan etc
- Alerts and Announcements
- Collaboration
- Incident Tracing
- Securing the KENET infrastructure by ensuring that network devices and systems are hardened before they go live

https://cert.kenet.or.ke

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Thank You

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