

Introduction to Global

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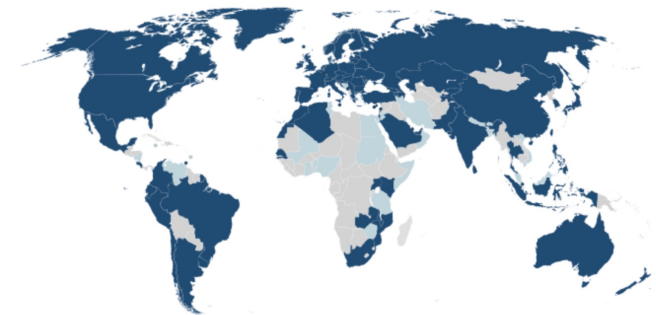
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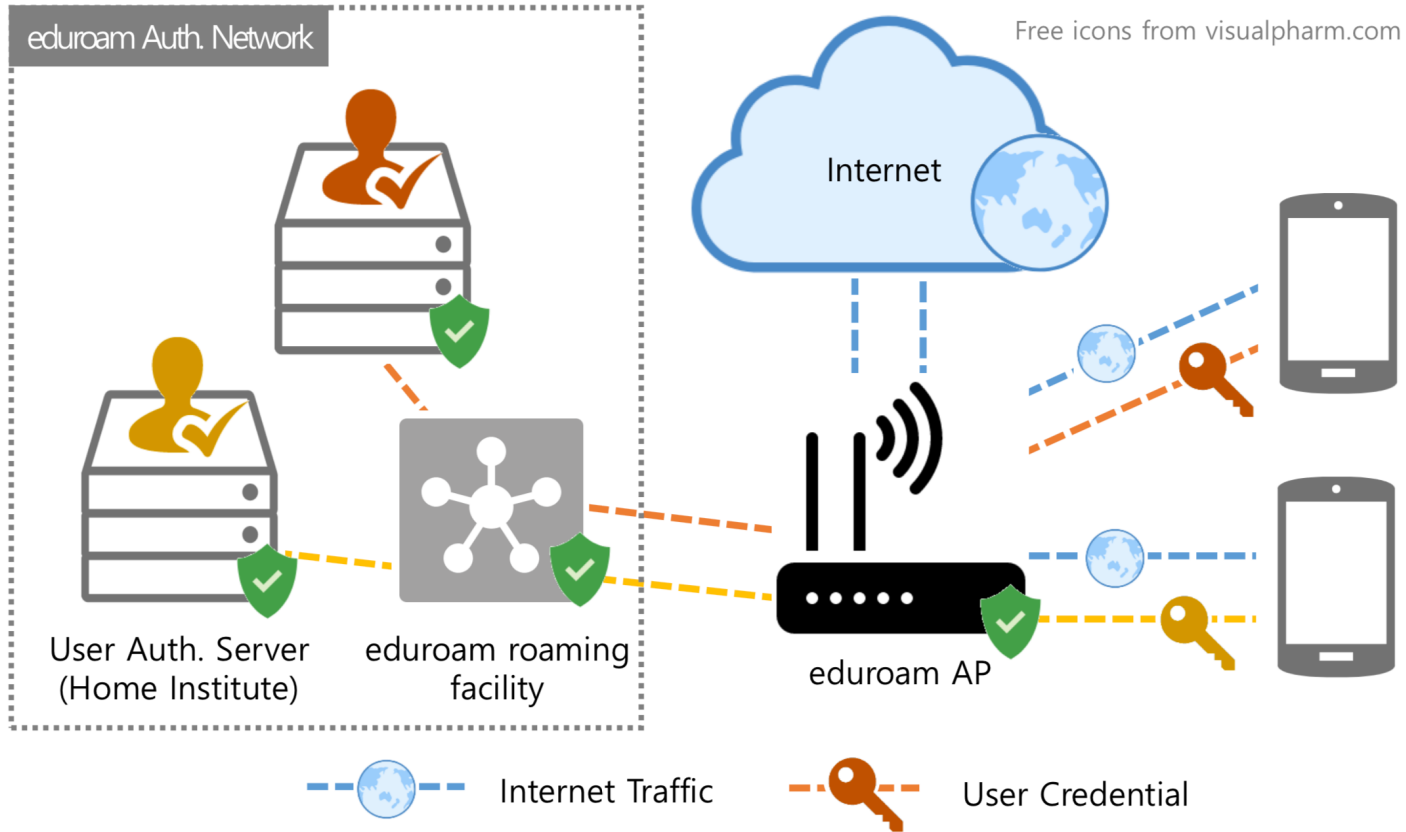


Introduction

- education roaming
 - Easy network access when visiting other institutions.
- Started in 2002 in Europe
- Over 86 countries, 5367 Inst., 24283 Places
- Global eduroam Governance Committee (GeGC)
- Hierarchy of RADIUS servers and 802.1x
- Defined in RFC7593



eduroam in brief

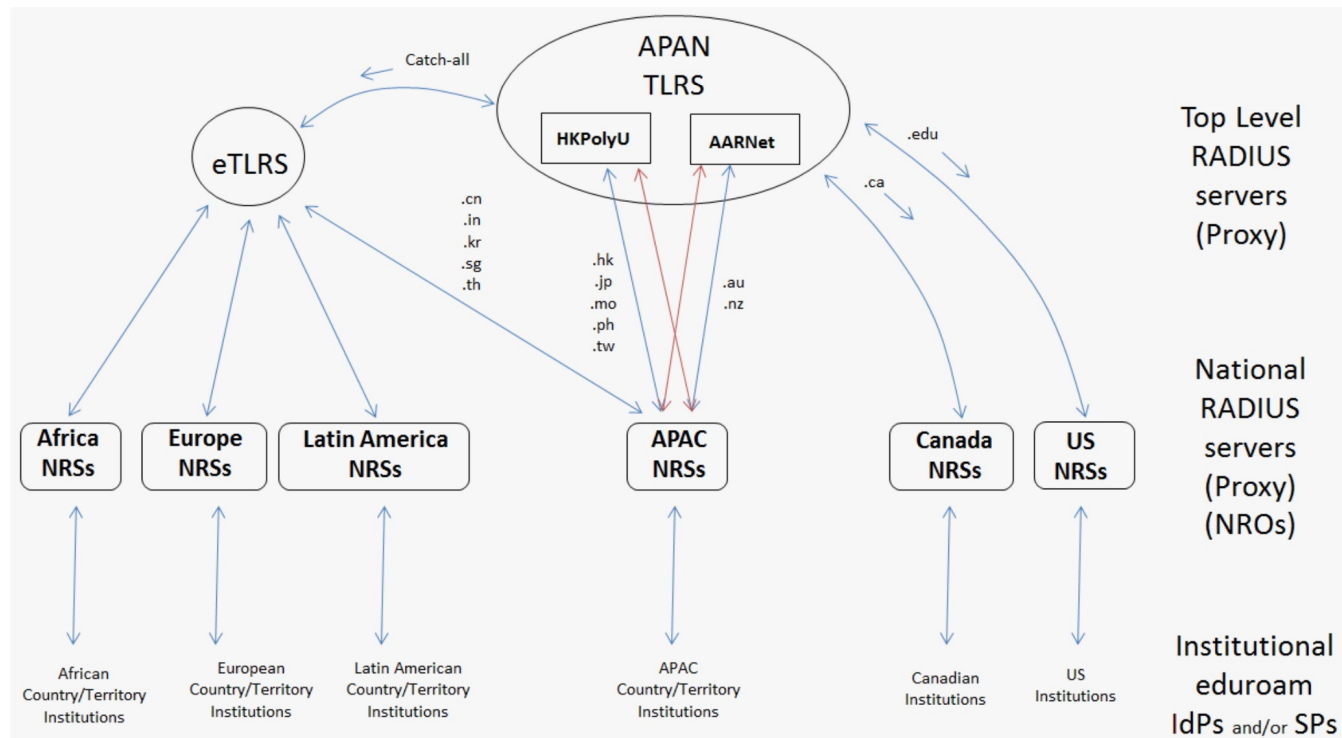


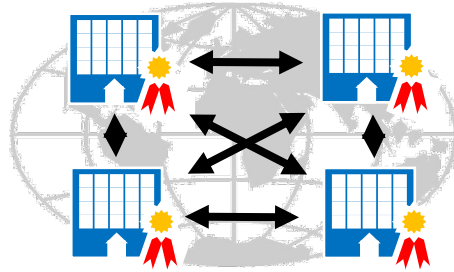
eduroam in Brief

- Global Wi-Fi roaming service for R&E Users
 - Visited institute grant network access by authentication on user's home institution.
- Zero-effort access on Global R&E Network
 - Once configured, auto-logged on eduroam AP all around the world.
- Network Based on Participation
 - NREN and institutions provide eduroam AP to all eduroam users, and its user can use global eduroam.

APAC Top-Level RADIUS Servers

- “Classical” eduroam uses hierarchical infrastructure
 - Institutional, National, Regional (Top-Level) RADIUS servers





EU: Netherlands, Denmark / Asia-Pacific: Hongkong, Australia



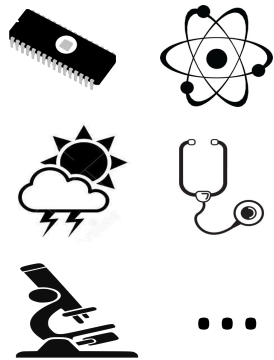
Global Top Tier Operation

- Researches on Intl. Roaming Service
- Management on Intl. Auth. Service
- Support Intl. Auth. Troubles

- Member (IdP/SP) management
- Management on Domestic Auth. Service
- Support and Tanning on Auth. Service



National Top Tier Operation



Natl. Research. Inst., etc



Center for Commercial Area



Companies



Center for Higher Education

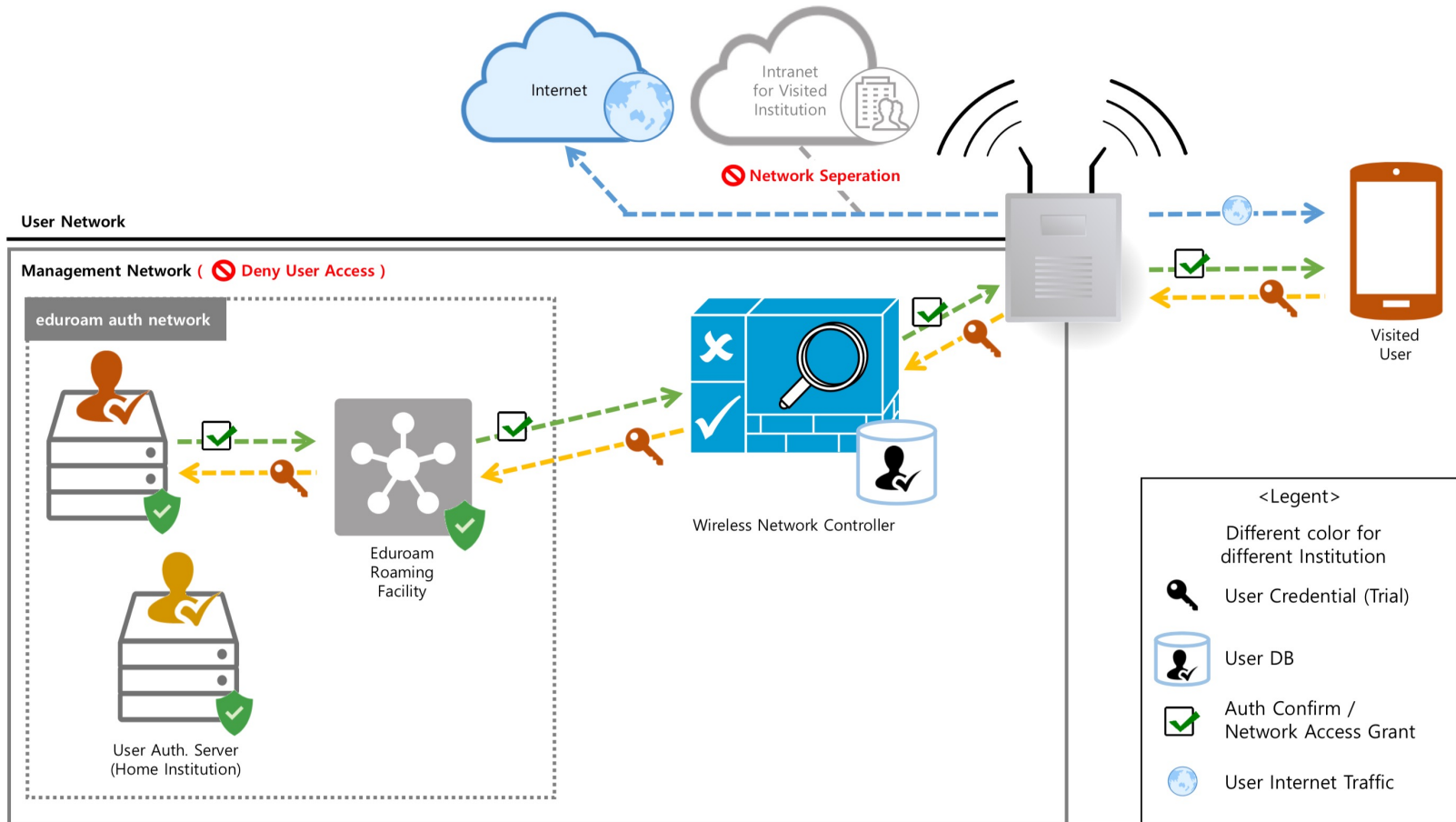


Universities

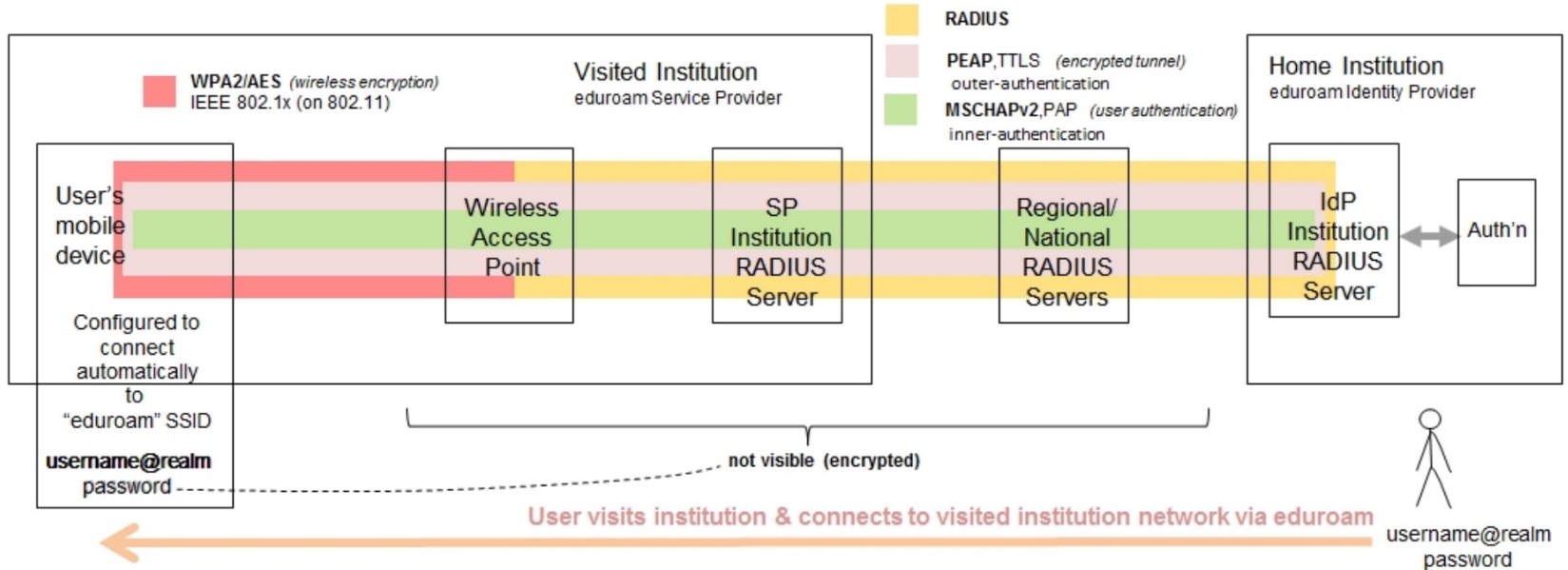
eduroam in technical perspective

- Infrastructure Components:
 - Supplicant, Network Access Server, RADIUS Servers (Proxy Servers, Authentication Server)
- Protocols: 802.1x (EAP over LAN), RADIUS with tunnelled EAP (TTLS, PEAP)
- Institutions have “Identity Provider” (IdP) (authenticate) and/or “Service Provider” (SP) (proxy for remote auth, grant access) roles

eduroam in technical perspective



eduroam in technical perspective



Questions?

Thank You

Please send feedback and questions to:

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