



WACREN Update

AfREN Meeting

Tunis, 01 June 2015

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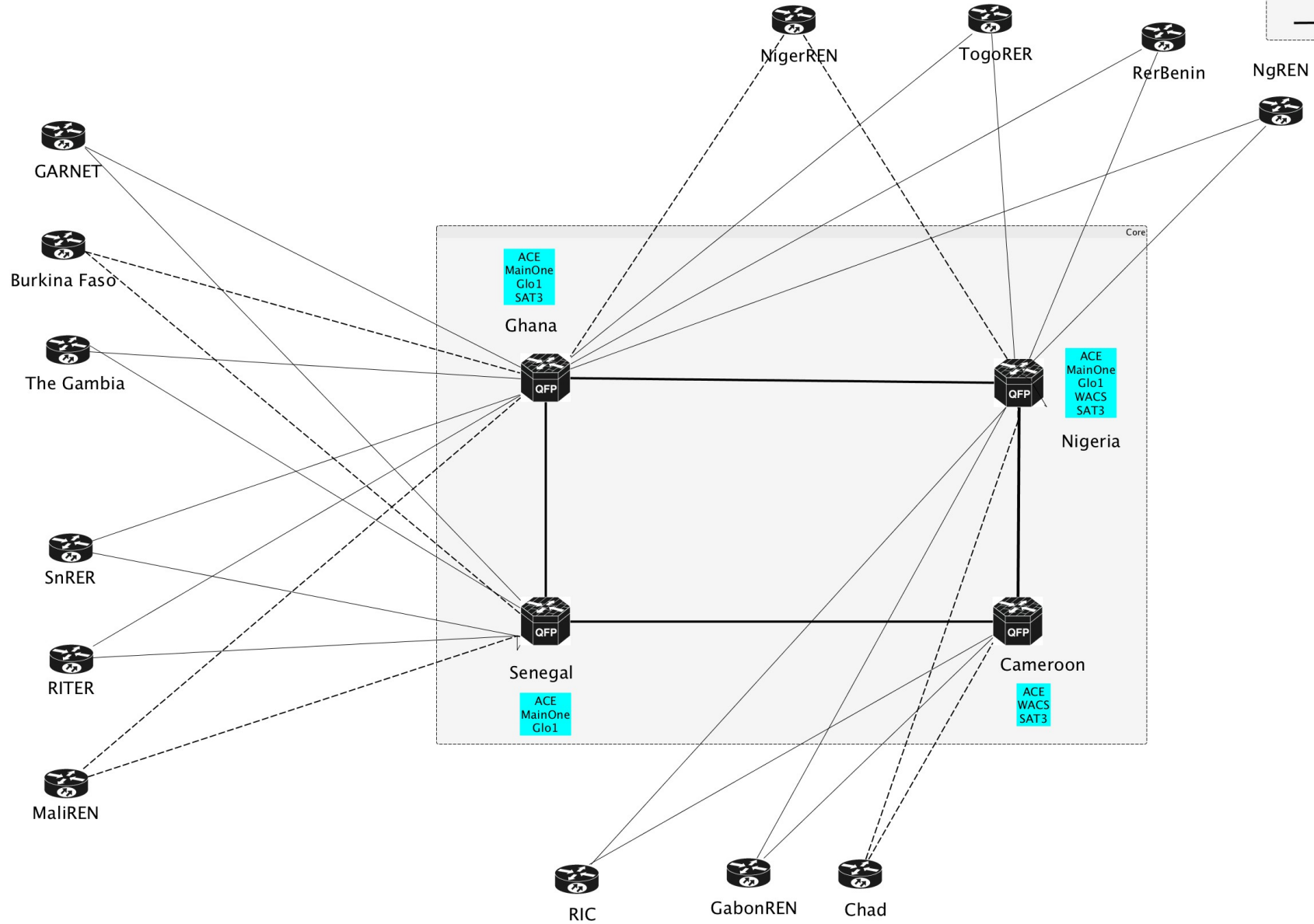
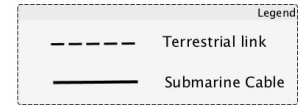
WACREN in a nutshell

- Currently 9 formally established NRENs
 - RITER – Cote d’Ivoire
 - GARNET – Ghana
 - snRER – Senegal
 - MaliREN – Mali
 - Niger-REN – Niger
 - GabonREN – Gabon
 - NgREN – Nigeria
 - TogoRER – Togo
 - RerBenin – Benin
- NREN embryo in Cameroon
- Initiatives in Chad, Guinea, Cape Verde and Congo

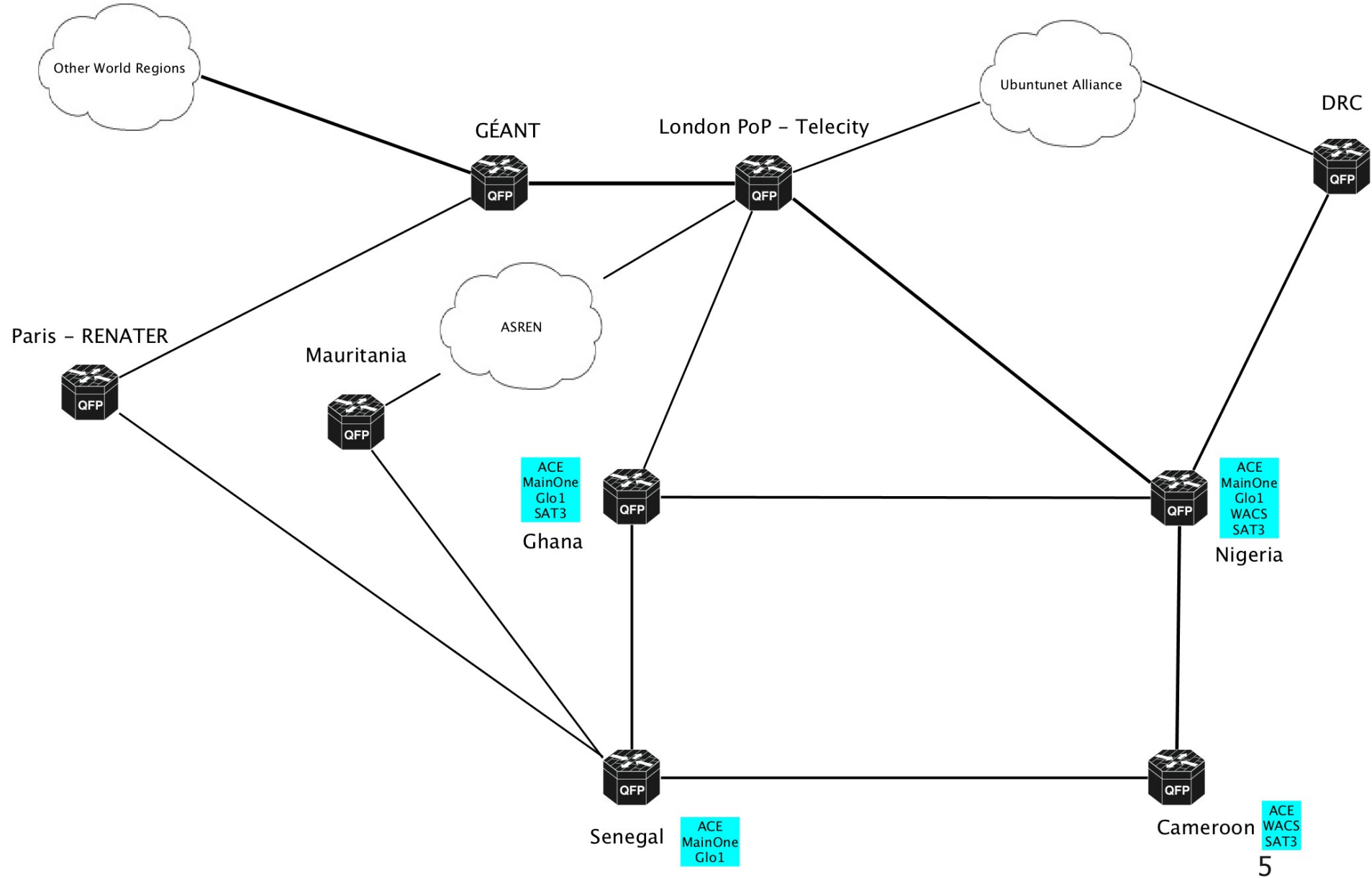
WACREN in a nutshell (cont'd)



Proposed Network



Proposed Network (cont'd)



Recent developments

Admin

- Successful execution of the DANTE-WACREN agreement (under AfricaConnect) – 1 year (ended May 2015)
 - Result of consultations between WACREN, DANTE (GÉANT), UA and the EUC
 - Support to WACREN Secretariat
 - Appointment of CTO
 - Appointment of Office Administrator
- 3rd and 4th Board meeting held in Oct. 2014 and Feb. 2015
- Establishment of platforms for updates and experience sharing
 - For NREN CEOs (3 online meetings held so far)
 - For NREN CTOs (many online contacts with designated technical focal points of the various NRENs)

Advocacy

- AfricaConnect2 high on WACREN's agenda
- Several authorities approached for sensitization
 - ECOWAS
 - UEMOA
 - AfDB (second phase of UEMOA's PAES project)
 - WATRA
 - Governments
 - Côte d'Ivoire
 - Sénégal
 - Nigeria
 - Niger
 - Togo
- Other issues being addressed with the authorities
 - Legal status of the NREs
 - Full-time staffing



Capacity building

- Regional capacity building workshop
 - September 2014 in Accra, in collaboration with NSRC, AAU, AfricaConnect, GARNET and University of Ghana as host
 - Open source tools for server virtualisation, clustering and management
 - Oversubscribed – more than 80 applicants after 2 weeks
 - 28 participants selected from 6 NRENs - GARNET, NigerREN, NgREN, RerBenin, RITER and TogoRER
 - Followed by Direct Engineering Assistance in host institution (UG)
 - Triggered ongoing activity in NgREN and GARNET to leverage learning outcomes in web based cluster virtual server management
- Second workshop planned during WACREN 2015
 - Will now hold end of September 28 - October 2, 2015
Network Monitoring, Management and Measurement.

Capacity building (cont'd)

- Training needs assessment
 - Online questionnaire
 - 177 invitations sent - response rate of 37%
 - Target: NREN principals - CEO, CTO, Campus IT Directors, Network Managers, researchers
 - First findings suggest the following priorities:
 - Campus network design, NREN networking and peering, scalable wireless networks, Network monitoring and management
 - Trust and Identity management incl. CERTs
 - Hosting and Collaboration (content storage and delivery, repositories, etc.)
 - Strategic planning (organisational, technical, financial)
 - Refined analysis of data ongoing

Projects

- Participation in various projects to be funded by EC
 - TANDEM - TransAfrican Network Development
 - MAGIC - **M**iddleware for collaborative **A**pplications and **G**lobal **vI**rtual **C**ommunities
 - Sci-GAIA - Energising **S**cientific Endeavour through Science **G**ateways and e-**I**nfrastructures in **A**frica
- May 2015 - April 2017
- Project proposal awaiting review - June 2015
 - AfricaProtect - African Cyber Security Research and Threat Intelligence Collective
 - builds on the Africa Training Initiative (ATI) to provide a framework for building capacity to make African networks cyber resilient by extending knowledge and enhancing skills in cyber security.
 - Collaboration with AfricaCERT and others

Status of NRENs in the region

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- NgREN (Nigeria)
 - About 30 institutions connected to NOC
 - Commissioned in July 2014
 - 102 other universities and 17 teaching hospitals to be connected within the next year
- snRER (Senegal)
 - Interconnection of the 5 public universities completed
 - International connectivity procured (Internet access for now)
 - Videoconferencing equipment already installed in all these institutions
 - Tests of services ongoing

Status of NRENs in the region (cont'd)

- RITER (Côte d'Ivoire)
 - 3 universities interconnected (2 others in the process of being connected)
 - 1 data center
 - 8 lecture halls equipped for videoconferencing
 - Second phase in procurement process (2 other universities to be connected to RITER, 1 data center and 10 lecture halls equipped with VC)
- GARNET (Ghana)
 - Proof of concept for deployment of a 1 Gbps backbone with a telecom operator ongoing
 - Applications for IP resources for GARNET and its members ongoing

Status of NRENs in the region (cont'd)

- Niger-REN (Niger)
 - Interconnection of 9 institutions planned (MoU with ministry signed)
 - Collaboration with SokREN (Nigerian REN cluster)
 - Niger-REN – NgREN meeting with WACREN's facilitation on this to be held asap
- TogoRER, RerBenin and MaliREN
 - Some progress noticed (organisational, buy-in of authorities)
 - Possible support from AfDB in the case of TogoRER
 - Possible support from World Bank in the case of MaliREN

Current and short-term focus

Current and short-term focus

- Readiness for second phase of AfricaConnect
 - NREN readiness and counter-part funding
- Negotiations with operators and provision of affordable connectivity and services to members
 - Current offers from operators still not satisfactory
- Capacity building
 - Analysis of survey data for training needs
 - Organization of other training workshops
 - Operationalisation of ATI - AfricaProtect*
- WACREN Federation as a Service (FaaS) platform
 - User friendly hosted services to bootstrap the uptake of Federated identity
 - NREN Identity Providers - GARNET, NgREN and snRER pilots ongoing, supported by WACREN
- AfricaConnect2 implementation + WACREN network rollout

THANK YOU

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