WACREN

Women in WACREN
WORKSHOP

Python for Weather and Climate Data Analysis

📅 27–30 Aug. 2024   📍 VCG Office Complex , Accra

Collaborators
nithub VCG GARNET Ghanaian Academic and Research Network pyladies Ghana WOMEN intech Ghana iOT

With Support From
Africa Connect3

ABOUT WACREN

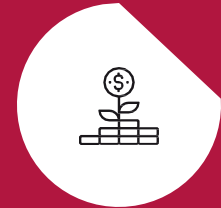West and Central African Research and Education Network

WACREN

VISION

To be a world-class infrastructure and services for the West and Central African Research and Education community, for development.

MISSION

To build and operate a world-class network infrastructure, develop state of the art services, promote collaboration among national, regional, international research and education communities and build the capacity of the REN community

MEMBERS

WACREN has 20 national members across the West and Central African region. Membership categories: NREN Member, Associate and Premium Associate

WACREN Members

- NREN Members (13)

Country	NREN
Burkina Faso	FasoREN
Cameroon	RIC
Côte d'Ivoire	RITER
Ghana	GARNET and GhREN
Guinea	GnREN
Liberia	LRREN
Mali	MaliREN
Niger	Niger-REN
Nigeria	NgREN
Sierra-Leone	SLREN
Tchad	TchadREN
Togo	TogoRER
Mauritania	**RIMER**

- Associate Members (7)

Country	Institution
Côte d'Ivoire	Université Virtuelle de Côte d'Ivoire
Côte d'Ivoire	Centre National de Calcul de Côte d'Ivoire
France	RENATER
Nigeria	Eko-Konnect
West Africa	WASCAL
Guinea-Bissau	Universidade Amilcar cabral
The Gambia	University of The Gambia

- In formation:
  - Benin – RBER (formalisation)
  - The Gambia
  - Guinea Bissau

RENs – MUCH MORE THAN JUST CONNECTIVITY

- Deployment of R&E services for open access to educational resources – **Open Science Infrastructure**

- **Trust and Identity** services for a transparent and secure access to shared resources

- **Federated identity management** for libraries and other services

- Proactive **cybersecurity** for the members and their digital assets

- **Videoconferencing** services to support distance and blended learning

Objectives and Outputs

AC3 seeks to unlock the **potential of education and research** through increased access of African R&E institutions to digital infrastructures and technologies.

Output 1:
Access to affordable and adequate e-infrastructure is increased.

Output 2:
Dedicated R&E services and applications are developed.

Output 3:
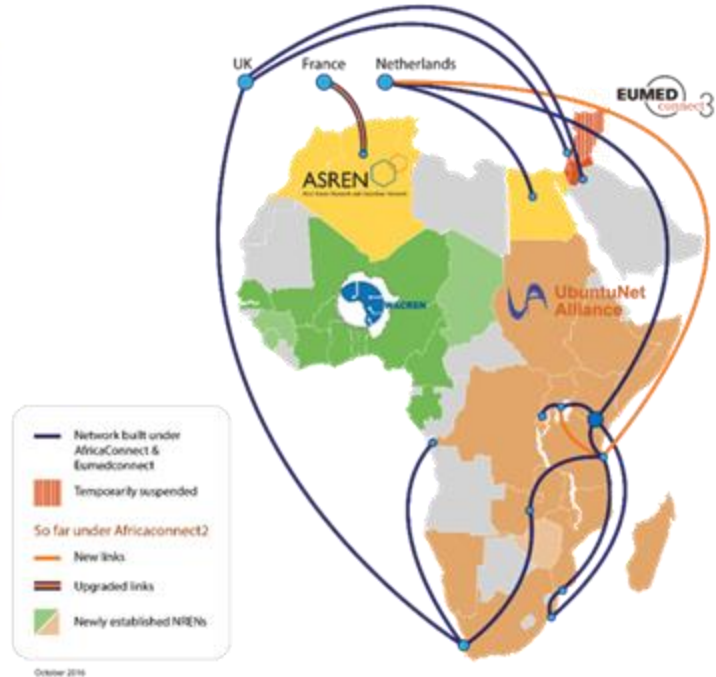Adequate human resource capacity and expertise is built.

Output 4:
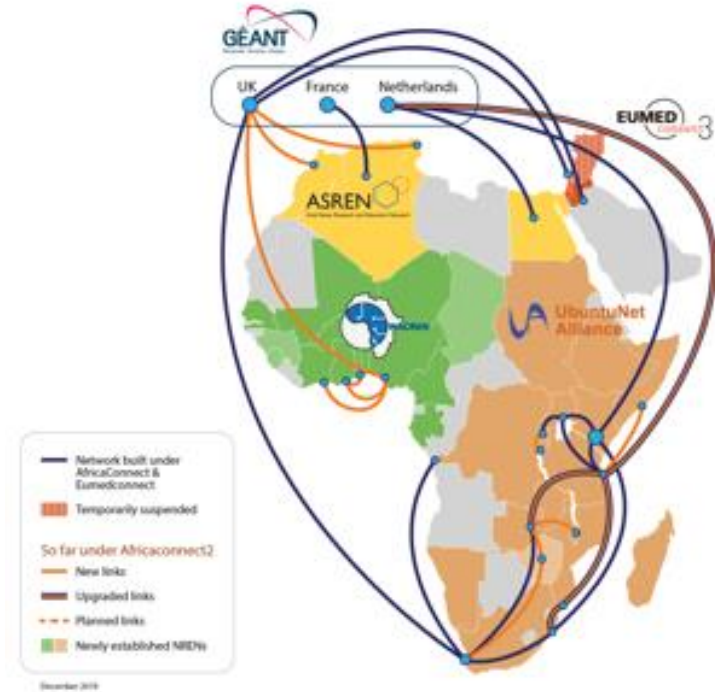Digital transformation in research and education is raised.

Connectivity of NRENs in Africa 2010-2019

Before AfricaConnect - 2010
5 Countries Connected

End of AfricaConnect1 -2015
9 Coutries connected

End of AfricaConnect2 -2019
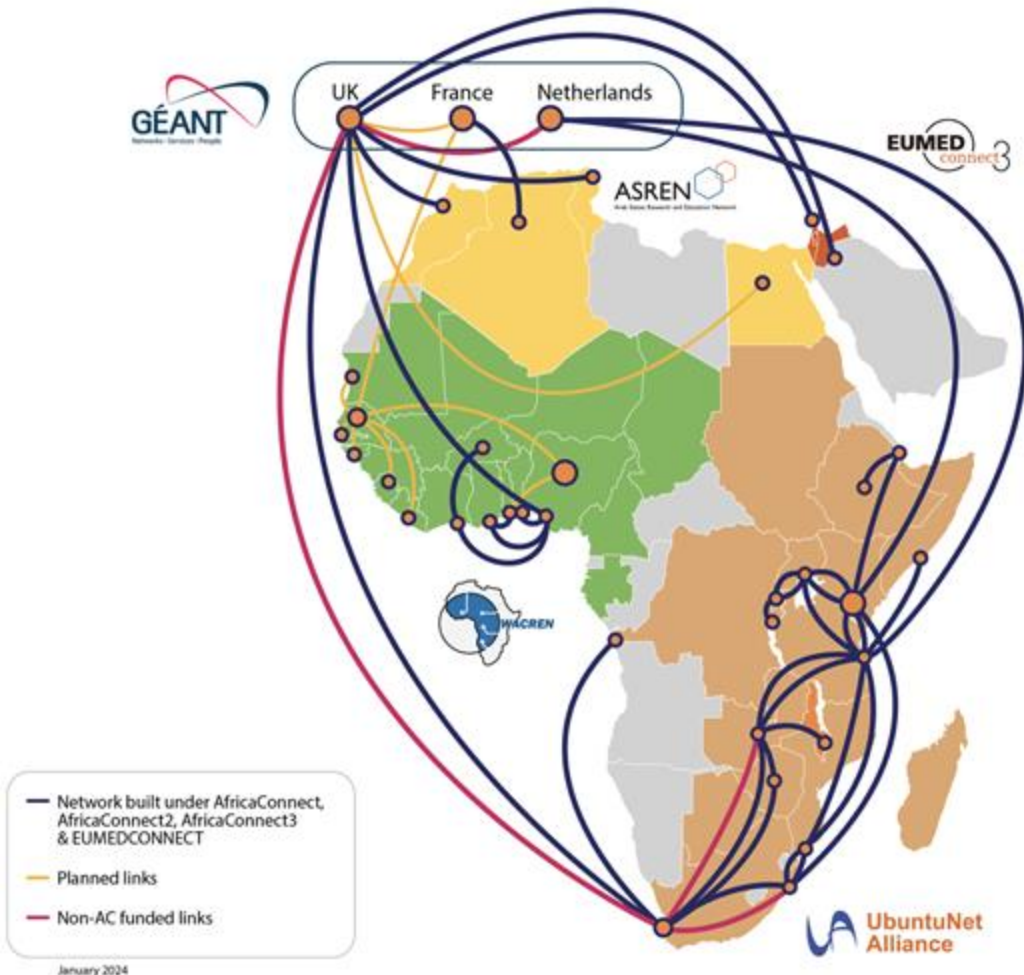19 countries connected

Connectivity of NRENs in Africa

Since AfricaConnect started in 2011, **23 out of 38 African NRENs have been connected to their regional network:**

o   **UbuntuNet Alliance 13**: Botswana, Burundi, DRC, Kenya, Malawi, Mozambique, Rwanda, Somalia, South Africa, Tanzania, Uganda, Zambia and Zimbabwe.

o   **WACREN 6**: Ghana, Nigeria and Togo, Benin, Burkina Faso and Côte d'Ivoire.

o   **ASREN 4**: Algeria, Egypt, Morocco and Tunisia.

WACREN to connect Guinea-Bissau, Guinea, The Gambia, Liberia, Sierra-Leone, Mauritania

AC4 Coming Soon – 2025 - 2029

About Women-in-WACREN

About Women-in-WACREN

Launched in 2018: WiW was initiated by WACREN to tackle gender inequality and the under-representation of women in STEM fields.

Mission: To educate, equip, and empower women with the necessary skills and confidence to excel in STEM careers, which are traditionally male-dominated.

Objective: Reestablish the Women In WACREN programme after a long hiatus and ensure its sustainable development.

Transformative Reach: Since its inception, WiW has inspired and transformed over 2000 young women into innovators, makers, and tech entrepreneurs within the WACREN region and beyond.

Expected Outcomes

Enhanced Skills: Participants will gain hands-on experience with IoT devices, use of Python for weather data analysise, and scientific computing.

Empowered Women: Participants are expected to gain confidence, expertise, and skills, boosting women's interest in STEM careers.

Innovative Projects: Development of innovative solutions for weather data acquisition and analysis.

Community Building: Establishment of a supportive community of women in scientific computing and STEM

WiW 2024 Event Overview

Focus for 2024: The upcoming event will concentrate on training in **Python for weather and climate data analysis.**

Workshop Goals: Provide hands-on experience and enhance technical skills in this crucial area of data science.

Intensive Practical Sessions: Participants will engage in a series of sessions designed to offer a deep understanding of Python programming and its applications in weather and climate data analysis

Expert Facilitation: The workshop will be led by experts in the field, allowing participants to learn from leading professionals and network with peers.

Day 1 : 27 August 2024

8:00 - 9:00 am	**Arrival and Registration**	WACREN
	Welcome Address	
	Welcome Addresses by WACREN	Effah Amponsah
	Introduction of Participant and Expectation	Everyone
	Goodwill Message from VGG	Dr Sena Kpeglo (VCG, Executive Secretary)
	Goodwill Message from GMeT	Dr. Eric Asuman (Ag. Director General)
	Goodwill Message from Group on Earth Observation (GEO)	Prof Kabo-bah (Board Ghana Principal)
	Introduction to the WiW Programme and its Aspirations	Abigail Essel
9:00 - 10:30am	Key Note Message by Guest Speaker	Prof. Nana Ama Browne Klutse
10:30 - 11:00	**Coffee Break & Group Photo**	
11:00 - 12:30	Overview of IoT Technologies: Concepts and Applications	Dr. Alowolodu
	Weather & Climate Data Collection Techniques and Best Practices	Dr. Naomi Kumi (UENR)
	Regional Activities in the WACREN-ICTP Programme	
	- Weather monitoring in Ghana	Prof Amos Kabo-bah (UENR)
	- River pollution monitoring in Nigeria	Prof Aderonke Okoya (OAU)
12:30pm - 1:30pm	**Lunch**	
	Introduction to sources of Climate Data (Reanalysis, satellite and Observation) and how to access these data sources	
1:30 - 2:30pm		Dr. Naomi Kumi (UENR)
2;30 - 3:00pm	Q&A	Dr. Naomi Kumi (UENR)
3:00 pm - 3:30 pm	**Coffee Break**	
	Introduction to Data Analysis and Visualization Tools and Techniques ((Timeseries, Bar charts, Spatial Maps, Pie Charts)	
3:30 - 4:30 pm		Doyin Afolabi (NITHUB)
4:30 - 5:00pm	Q&A	Doyin Afolabi (NITHUB)
Closing		Abigail Essel

DAY 1 AGENDA

Next Steps

Build a Women-in-WACREN community: Create a vibrant, supportive community where women in STEM can connect, share experiences, and collaborate on initiatives.

Expanding Training Opportunities: Introduce more specialized training in emerging STEM fields: twice in a year. →French

Building Partnerships: Collaborate with global and regional organizations to secure funding, resources, and mentorship opportunities.

Creating Networking Platforms: Develop online and offline platforms for participants to connect, share knowledge, and collaborate on projects.

Monitoring and Evaluation: Implement robust monitoring and evaluation frameworks to track progress, measure impact, and refine strategies.

Assigning Mentors: Pair participants with experienced mentors to guide their development, offer support, and foster career growth

WACREN

Trust, Identity & Access Management Roadshow Sierra Leone

For university ICT directors, REN DevOps engineers, application developers, REN system engineers, university librarians, researchers and faculty staff

🕘 9:00 Am 📅 4 - 6 September, 2024 📍 Njaja University | Njala

LOCAL HOST WITH SUPPORT FROM
Africa Connect3

WACREN

BGP WORKSHOP FOR NATIONAL RESEARCH AND EDUCATION NETWORKS

🕘 09:00 UTC 📅 2ND - 4TH OCT. 2024 📍 ACCRA

WITH SUPPORT FROM
Africa Connect3

WACREN

eduroam Deployathon Nigeria

Implementing eduroam On A Campus Network

🕘 9:00 AM 📅 9TH-11TH OCT 2024 📍 UNIVERSITY OF LAGOS

LOCAL HOST WITH SUPPORT FROM
Africa Connect3

eduroam

TBA TRUSTBROKER AFRICA

SIM3 AUDITOR CERTIFICATION TRAINING

🕘 09:00 UTC 📅 14-17 October 2024 📍 Cotonou, Benin

Applicants need to have demonstrable knowledge, sufficient experience in CSIRT/SOC/ISAC work, and familiarity with the CSIRT community

ORGANIZED BY HOST FACILITATORS WITH SUPPORT
FG BENIN Open CSIRT Foundation SHADOWSERVER Africa Connect3

Thank you

Any questions?

 @AC3_News   AfricaConnect3   africaconnect3.net

 @WACREN   @WACRENInfo   wacren.net