

17 July 2018

Community Networks Online Training

GAIA Research Group Presentation – IETF 102 Montreal



IEEE & Internet Society Partnership

- In 2015, a partnership was formed to develop online training resources based on the materials used in the successful Wireless for Communities (W4C) initiative
- Train-the-Trainer (ToT) component geared towards enabling communities to self-sufficiently build capacity
- Develop CN community capabilities and increase workforce readiness
- Foster the building and support of sustainable, not-for-profit wireless networks in communities across the globe
- Support universal Internet access as the foundation for wide scale benefits in areas such as education, healthcare, government, etc.

Course Development Process

- Worked with content development partner to integrate learning pedagogy, effective instructional design elements, mini-quizzes, etc.
- Engaged the IEEE 802.11 standards group to review and refine content
- Delivered pilot in 2016 to validate learning objectives and community buy-in
- Translated the course into Spanish to meet regional needs and increase penetration
- Embedded M&E processes to ensure the course is meeting the needs of communities and to facilitate continuous improvement

Course Content

The course includes diverse subject matter:

- Radio Physics
- Site Planning (e.g. power, backhaul, grounding, erecting masts, Fresnel zones, link budget, etc.)
- Networking (e.g. IP addressing, routing, web proxies, transport layer firewalls, tunnelling, etc.)
- Securing Wireless Networks
- Access Point Configuration
- Troubleshooting Wireless Networks

Partnerships

- **AfChix** – Focusing on building capacity and empowering women in tech across Africa
- **FLOSSFA (Free and Open Source Software Foundation of Africa)** – Providing training and increasing workforce readiness
- **DEF (Digital Empowerment Foundation)** – Training geared towards preparing inexperienced technicians deployed to the field to hit the ground running
- **Network Operator Groups (NOGs)** – Working with NOGs in Africa and Latin America to increase capacity building offerings to their communities
- **Chapters** – Working with ISOC Chapters to deliver customized training to their members

Progress To Date

- 2017
 - Trained 20 moderators in Asia-Pacific, Africa and Latin America
 - Delivered the course to approximately 150 individuals
 - Invited existing CN practitioners from across the world to regularly speak to participants
 - Collaborative Leadership Exchange (CLX) on CNs delivered at LACNIC/LACNOG Meeting
- 2018
 - Integrated the course delivery with ISOC's CN Campaign
 - Moderator training currently in progress (15 individuals from 13 countries)
 - Q1: *105 individuals trained from 21+ countries*
 - Q2: *120 individuals trained from 25+ countries*
 - Call for applications to open shortly for Q3 training cohorts

Next Steps

- Create an outsourced model to allow various communities to self-manage delivery of the course
- Develop an offline version of the course for disconnected communities
- Forge strategic partnerships to scale the training into the thousands
- Explore translation of the course into other languages to facilitate scale: French, Arabic, etc.
- Make substantive updates to the content in 2019

ANY QUESTIONS?