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

• FOSSFA (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?