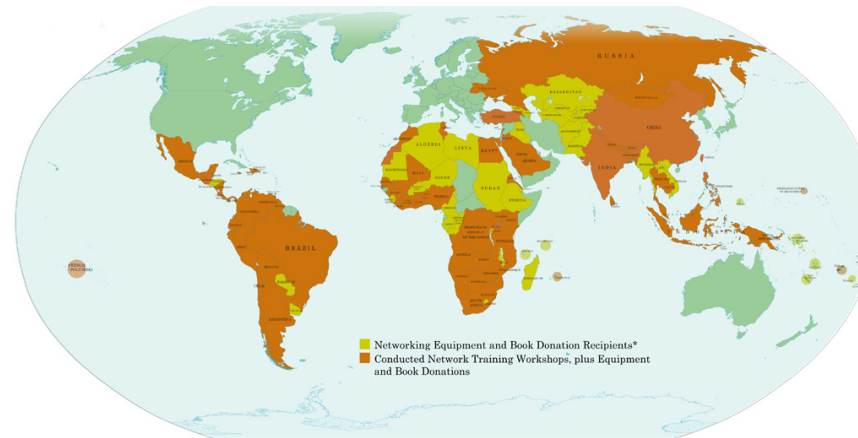


NSRC update PacNOG 14



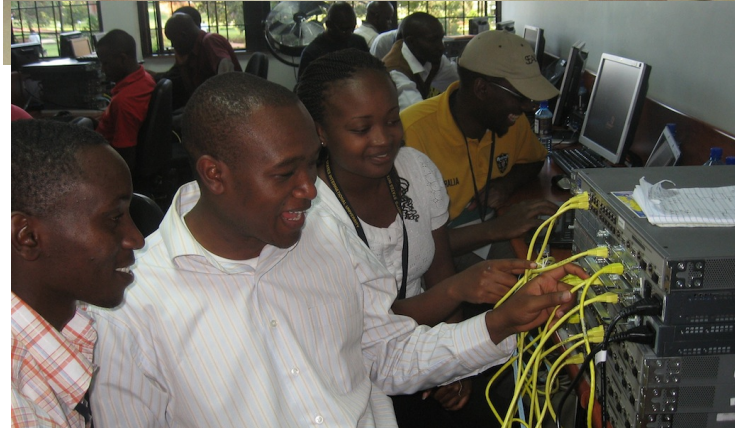
NSRC
Network Startup Resource Center

Network Startup Resource Center
www.nsrc.org

NSRC capacity building

- 20 years!
- Providing technical information, direct engineering assistance, training and equipment to help build network capacity in developing countries
- Global scope
- NSRC addresses and solves problems in the field with local partners
 - Direct engineering assistance to improve campus networks
 - DNS stability and security/ccTLD technical assistance/DNSSEC
 - Equipment donations to improve core infrastructure and IP services
 - Wireless networks - improving both faculty and student access
- Surveying network connectivity needs for NSF-supported research activities in the Pacific region in collaboration with University of Hawaii

Enabling international cooperation and communication



PacNOG 1 – Nadi, Fiji, 2005



Workshops topics have included:

- IPv4/IPv6 routing workshops including OSPF-BGP routing, multihoming, etc.
- Internet and network security including DNS Security
- Introduction and advanced network security and forensics
- System administration, Linux/Unix and DNS Infrastructure
- Network management and monitoring
- VoIP and telephony solutions
- ccTLD: introduction and advanced registry operations
- Internet exchange points (IXPs)

And many, many more topics during conference days

Results

Technical training provided to over 500 network technicians from Industry, Education, Government and Scientific Research Stations representing over 20 Pacific Nations, including:

American Samoa

Australia

Cook Islands

French Polynesia

Fiji

Federated States of Micronesia

Guam

Kiribati

Marshall Island

Nauru

New Caledonia

New Zealand

Niue

Palau

Papua New Guinea

Samoa

Solomon Islands

Tonga

Tuvalu

Vanuatu

During 2011-2012, NSRC worked in 46 countries around the world, at 98 events training and assisting over 2,350 people:

	AF	AP	EU	LA	NA	ME	Total
Men	1020	705	43	118	66	42	1994
Women	205	80	20	34	17	4	360

- Facilitated donations of 3.5 tons of network equipment worth \$1M to 130+ universities, research institutes and emerging NRENs
- Facilitated donations of 2.8 tons of books worth \$375,000 to 3,000+ people, libraries, and university computing centers
- Arranged for ~\$200,000 in fellowship funding to support dozens of network technicians from Africa, Asia/Pacific and Latin America to attend networking events and science meetings for collaboration with U.S counterparts

Worked with many RENS providing direct assistance and training:

<i>BDREN</i>	<i>CAMREN</i>	<i>CEDIA</i>	<i>DrukREN</i>	<i>Eb@le</i>	<i>ZAMREN</i>
<i>GARNET</i>	<i>INHERENT</i>	<i>KENET</i>	<i>LEARN</i>	<i>LERNET</i>	<i>MAREN</i>
<i>MARWAN</i>	<i>MYREN</i>	<i>MoREN</i>	<i>ngREN</i>	<i>PERN</i>	<i>PregiNET</i>
<i>RedCLARA</i>	<i>SenRER</i>	<i>TENET</i>	<i>TERNET</i>	<i>UbuntuNET</i>	<i>VINAREN</i>

And looking forward to helping build Pacific R&E networks!

2013

- 47 programs with field activities in 42 different countries across Africa, Asia/Pacific, Latin America/Caribbean and the Middle East
- 1000+ technicians and engineers have benefited from network training and network engineering assistance activities and programs
- Funding in 2013 to support NSRC's Internet development work:
 - Large gift from Google at the beginning of the year
 - National Science Foundation support via two grant awards
 - Additional gift from the Internet Corporation of Assigned Names and Numbers (ICANN)
- In-kind support of equipment donations from Cisco Systems and Books from O'Reilly Media, Inc.

Moving Forward...

- Major goal over the next three years is to provide sustainable technical expertise to support the current rapid build-out of research & education networks (RENs) in SSA and other emerging locations
- Approach is to expand local network engineering expertise in university IT departments and REN organizations to a sustainable level using a train-the-trainers approach... Connecting the campus network to the national, regional and international Research and Education fabric by working with NRENs in dozens of countries
- Urgency and need for scale are driven by high demand for NSRC-level network training/planning services which has been created, in part, by large European Union-funded programs for REN expansion in SSA (e.g., africconnect.eu), South, SE and Central Asia that are funding capacity/equipment but are not funding technical training/services
- Closer coordination with IRNC awardees including PRAGMA, Internet2, DANTE, APAN, TEIN*CC, UbuntuNet Alliance, WACREN, RedCLARA, CAREN and regional RENs

In the Pacific

- As connectivity improves proper network infrastructure, planning and knowledge become more important.
- Ramping R&E activities will require solid campus architectures, upstream connectivity, traffic exchange
- PacNOG's human and technical community building helps to facilitate this.

Thanks!

- Thanks to the National Science Foundation, Google, ICANN for making all this possible.

- Check us out at:

www.nsrc.org / google.com/+nsrccorg /
facebook.com/nsrcc.org / twitter.com/nsrccworld



ciscopress.com



google.org



Richard M. Karp Charitable Foundation



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MacArthur Foundation

