

The Network Startup Resource Center

<http://www.nsrc.org>

APRU CIO Conference 2008

April 16-19, 2008

Dale Smith



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History

- Started by Randy Bush and John Klensin in late 1980s and early 1990s
- First NSF Funding 1992
- Activity moved to University of Oregon in 1996
- Currently staffed by 1 program manager, 2 part time employees, and lots of volunteer labor



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Mission

- Catalyzes and assists networking to and within the least connected regions of the world
- Provides technical information, engineering assistance, training, and equipment to R&E institutions and ISPs in developing world
- Catalyze local technical groups to work together
- Works on solving specific communication problems with scientists and engineers on both ends of the connectivity spectrum



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Services

- Focus on supporting grass roots efforts
 - Training, books, equipment, DNS, mail, etc
 - Hosting of technical personnel
- Forming and supporting NOGs
 - SANOG, PacNOG, WALC, AfNOG, NGNOG
- Assistance with forming Regional Internet Registries
 - LACNIC, AFRINIC



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Early Efforts

- First email (UUCP or FidoNet) for many developing nations
- First Internet connectivity for
 - Egypt, Indonesia, Kenya, Liberia, Morocco, Peru, Saudi Arabia, South Africa, Sri Lanka, Tanzania, Togo, and assistance to many others
- Development of Exchange points
 - Panama, Uganda, Democratic Republic of Congo, Swaziland, Ghana, Angola



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Early IP Links

From: Randy Bush <randy@psg.com>

To: goldstein@nsf.gov

CC: John C Klensin <klensin@infofoods.unu.edu>, Olivier
Crepin-Leblond <o.crepin-leblond@ic.ac.uk>

Date: Tue, 7 Jun 1994 12:18:18 -0700

Indonesia is up on the new 64kb link,

traceroute caddsys.iptek.net

traceroute to caddsys.iptek.net (202.46.1.2), 30 hops max, 40 byte packets

```
1 e0.r0.psg.rain.rg.net (147.28.0.58) 6 ms 5 ms 5 ms
2 e0.r1.pdx.rain.rg.net (199.2.96.34) 16 ms 15 ms 16 ms
3 e0.r0.pdx.rain.rg.net (199.2.96.33) 20 ms 44 ms 19 ms
4 144.228.201.193 (144.228.201.193) 66 ms 43 ms 56 ms
5 sl-stk-1-F0.sprintlink.net (144.228.8.225) 474 ms 42 ms 87 ms
6 * * *
7 * * *
8 202.46.1.2 (202.46.1.2) 1830 ms 755 ms 759 ms
```

randy



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NSRC has wide reach

- A short and incomplete list:

Afghanistan, Algeria, Argentina, Armenia, Angola, Bangladesh, Belize, Benin, Bhutan, Bolivia, Botswana, Brazil, Burkina Faso, Burundi, Cambodia, Cameroon, Colombia, Comoros, Congo-Brazzaville, the Democratic Republic of the Congo, the Dominican Republic, East Timor, Ecuador, Egypt, Eritrea, Ethiopia, Gabon, Gambia, Georgia, Ghana, Guatemala, Guinea, Guyana, Haiti, Indonesia, Iraq, Fiji, Kazakhstan, Kenya, Kyrgyzstan, Laos, Liberia, Malawi, Mali, Mauritania, Mongolia, Morocco, Mozambique, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Panama, Papua New Guinea, Peru, Philippines, Rwanda, Senegal, Solomon Islands, South Africa, Sri Lanka, Sudan, Swaziland, Tanzania, Thailand, Togo, Uganda, Uruguay, Uzbekistan, Venezuela, Vietnam, Zambia, and Zimbabwe.

- Google for “NSRC Oregon”



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Current Projects and Focus

- Lots of activity and funding for Africa
- Focus on Development of National R&E Networks
 - Nepal, Bhutan, Kenya, Nigeria, Ghana and others
- Campus networking best practices
- Supporting NOG activities
- Supporting other training activities
 - <http://www.interlab.ait.ac.th/training.html>



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Funding & Support

- US National Science Foundation
 - Continuous NSF funding since 1992
- Specific project funding from many quarters
 - IDRC, ISOC, Carnegie, OAS, and many others
- Many other supporters
 - Cisco, O’Rielly, DHL, and others
- A lot of individuals around the world



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Challenges in Developing Nations

- Financial
- Lack of Technical Personnel
- Lack of infrastructure
 - Telecom & Power
- Oppressive telecom and regulatory environment
- NSRC can help with a few of these problems
 - Training for personnel
 - Used equipment for campus networks
 - Books and technical resources



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What Does This Mean for You

- Get involved in your regional NOG
 - SANOG <http://www.sanog.org/>
 - PacNOG <http://www.pacnog.org/>
- Volunteer
 - Always looking for folks who like to travel
 - Like to teach (routing, building linux servers for DNS, mail, web)
- Talk to the NSRC
 - Steve Huter sghuter@nsrc.org



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Questions?



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