



**INTERNATIONAL
NETWORKS**
at Indiana University



NEAAR
NETWORKS FOR
EUROPEAN, AMERICAN
& AFRICAN RESEARCH

Proactive Engagement: Practical Strategies for Identifying and Interacting with End Users

Edward Moynihan, November 1, 2019



**International
Networks**
at Indiana University

International Networks@Indiana University

Team

- Based in Bloomington, IN
- Partner closely in the US with the GlobalNOC and ESNet
- 4 active NSF awards (3 IRNC, 1 CC*)

Focus Areas

- Circuits to support US science collaborations
- Understanding and increasing circuit usage
- Improving performance
- Advocacy and Impact



The NEAAR Collaboration

- Funding from US National Science Foundation

Partners:

- Indiana University
- GEANT
- UbuntuNet Alliance
- WACREN
- ASREN
- SANREN/TENET



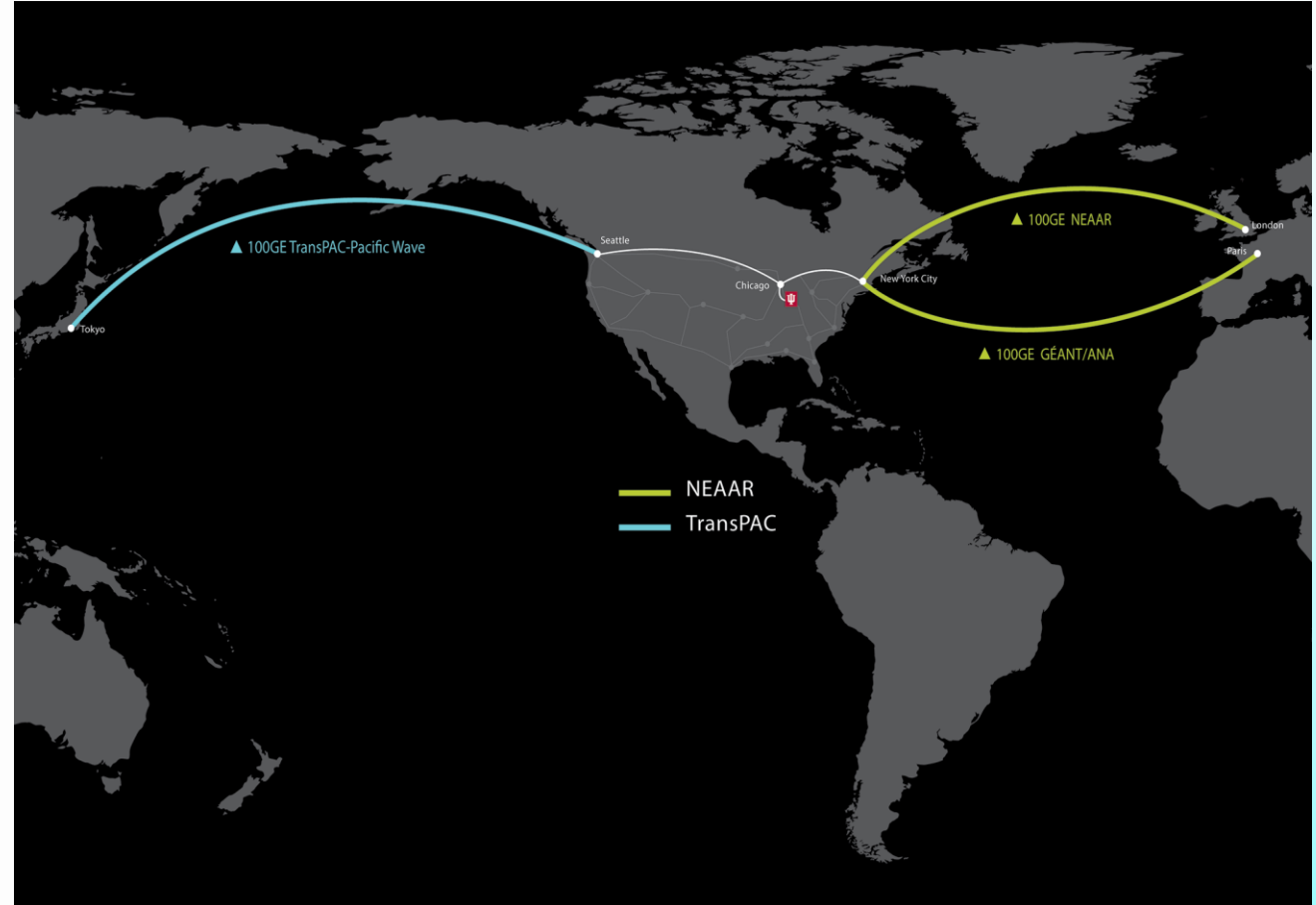
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NEAAR Activities

Connectivity:

- 100GB New York – London
- ManLan to London Open Exchange
- Backup agreements with GEANT (Sister Circuit) and ESnet
- Partner in the ANA consortium
- Follow GNA principles
- Leverage partner circuits to support international science collaborations

*Connectivity is the first step –
but usability must follow.....*



End User Engagement in Practice

- Ensure Network Usability
 - Understand who uses the network
 - Understand network performance
 - Use and Promote effective tools and technologies to improve performance
- Bridge Communication Gaps
 - Relationship Building and Management
 - PR and Communications
 - Business Development
 - Advocacy and Knowledge Exchange



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- Infrastructure often built without consulting researchers
- Researchers struggle to use our advanced services
 - Capability mismatch
 - Distrust between researchers and IT
 - Research groups build their own solutions
- REN organizations have a responsibility to engage end-users
 - Improving end-to-end performance
 - Increasing Utilization

Investment and Proactive effort is critical!



Being Proactive

- Putting Measurement and Monitoring tools in place
- Finding Your Researchers
- Deliberate Outreach
- Strategic Communication

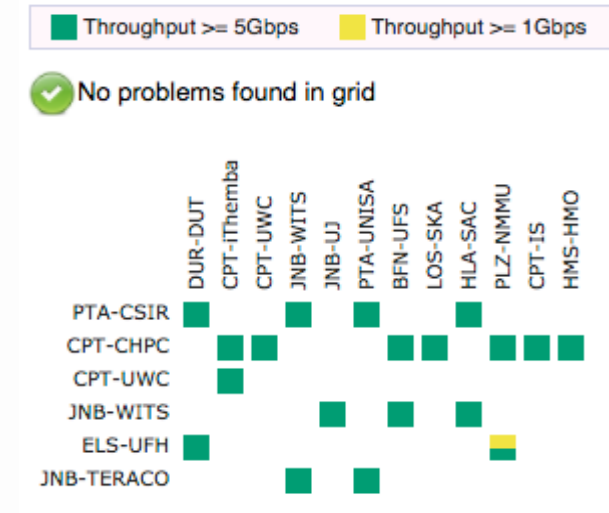


Measurement and Monitoring

- perfSONAR
 - Set network performance expectations
 - Find network problems (“soft failures”)
 - Help fix these problems
 - All in multi-domain environments

- NetSage

- Better understanding of current traffic patterns across instrumented R and E circuits
- Performance information for data transfers
- Flow Analysis
- <http://portal.netsage.global/>



Flow Data per Country -

Top Talker Organizations to/from Tanzania

| Source Organization | Destination Organization | Total Volume | Largest Flow | # Flows |
|-------------------------------------|-------------------------------|--------------|--------------|---------|
| University of California, San Diego | TERNET | 143.8 MB | 65.3 MB | 5 |
| TERNET | Internet Archive | 115.4 MB | 21.0 MB | 9 |
| TERNET | WiscNet | 105.6 MB | 23.7 MB | 5 |
| TERNET | Temple University | 103.7 MB | 21.8 MB | 6 |
| TERNET | Rutgers University | 102.1 MB | 14.0 MB | 9 |
| Rochester Institute of Technology | TERNET | 99.0 MB | 47.2 MB | 3 |
| TERNET | National Institutes of Health | 94.5 MB | 24.9 MB | 6 |



Finding your Researchers

- Network tools are useful but incomplete
- Funded grant databases
- Working with your members to find researchers
 - Campus IT (University, College, Department, Research Group)
 - Faculty meetings
 - Sponsored Research, VPR
 - Who is complaining the most?
- Immersion in Science Communities
 - Attend Domain Science meetings
 - Invite researchers to your meetings



I've found a researcher!



Now the outreach challenge begins...



7 March 2024

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Deliberate Outreach: What not to do!

COULD YOU REPEAT THAT?

MY CONNECTION IS A LITTLE
RUFF

quickmeme.com

- COLD CALL!
 - “Hello.....I’m from your NREN, and I was looking at our logs this morning and I noticed someone from your institution tried have an international video call with 3 other people and that you disconnected and reconnected several times. One of the other people didn’t seem to have the video stream on, and one of the other people tried to connect with computer audio twice and then called in on a landline....I am here to help!!!”
- Email without context or connection
- Use “IT speak”
- Not give a context
- Not give a clear “ask”



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Deliberate Outreach: What you can try

- Come to them with something they WANT
 - Some way you think you can help them
 - Don't insist on it - they have their own ideas
- Come to listen, in their space
 - Ask about their science
 - Ask about their pain points
 - Be realistic with how you can help
 - Have materials prepared in advance
- Buy them pizza!
 - Make it more social, less business



Strategic Communication

- If you get a success story....tell people!!
 - This is the best opening for others to understand what you do
 - Researchers talk to each other
 - You can have a solid example when you go to new people
 - You show you have a track record
- Submit to “In the Field” <https://www.inthefieldstories.net/>
- RREN, NREN, University Communications
- Document your Impact
- Submit a proposal to UbuntuNet Connect20



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