



August 11<sup>th</sup> 2014, APAN38  
Network Performance Tutorial  
John Hicks – Internet2

## Requesting Help

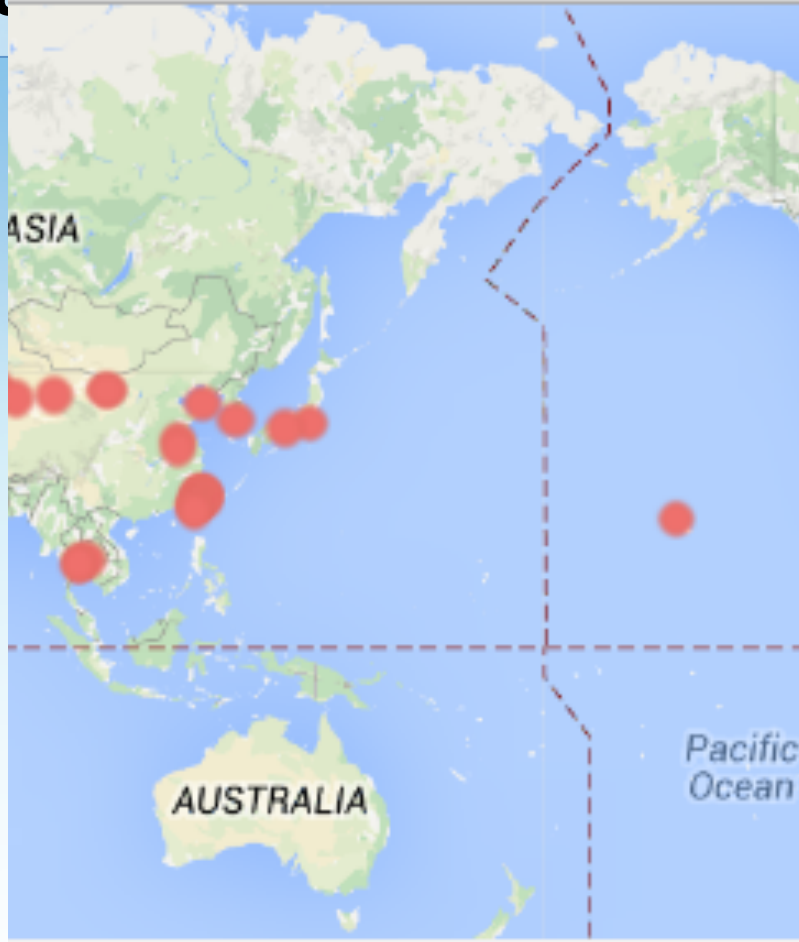
# Outline

- Getting in Over Your Head
- XSEDE
- Internet2
- Regional Networks

# Getting in Over Your Head

- Despite your best efforts in trying everything you've learned today, the problem persists. What to do?
- Ask for help!
- You will have already identified the basics for opening a well-informed trouble ticket. Include:
  - IP addresses and/or locations of endpoints
  - Traceroutes between endpoints
  - What you were trying to do
  - The result you expected
  - The result you obtained
  - When the problem occurred
  - Has it previously worked as expected?

# World-Wide perfSONAR-PS Deployments: 854 bwctl nodes 879 owamp nodes Jul '14



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# XSEDE

- The central XSEDE help desk for trouble ticketing is [help@xsede.org](mailto:help@xsede.org)
- Identify your trouble-shooting team. Ideally includes the user seeing the problem and a site network engineer
- Contact [help@xsede.org](mailto:help@xsede.org) to create a trouble ticket and assign to XSEDE ops-network group
- Help may come from:
  - XSEDE network engineers at the relevant SP site
  - XSEDE network performance debugging team
    - End-to-end perspective
- XSEDE file system and data working group support available as well, especially for bulk data transfer issues

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# Internet2

- Two Major Entry Methods:
  - NOC
    - Major responsibility is handling the backbone, and all things that it directly touches (e.g. regional peers, etc.)
    - Starting a ticket at the NOC comes with a risk – if this is an end to end ticket that doesn't involve the network, your ticket may be closed
    - [noc@net.internet2.edu](mailto:noc@net.internet2.edu)
  - Research Support
    - “End to End” support, e.g. there is no determination made on if this is related to backbone/customer site that will close the ticket prematurely.
    - Will be the ‘middle man’ and open tickets on involved networks, national and international
    - [rs@internet2.edu](mailto:rs@internet2.edu)



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# Regional Networks

- Contact address will vary by network
- As in the Internet2, a Regional Network may not have resources to debug a problem that is perceived to be 'not on their network' (e.g. "end to end" may stop when they are not in the path)
- A regional is a good place to start if you are not sure what to do next.

# Regional Networks (pS Participation)

- ***Regionals with, or acquiring, perfSONAR:***

- 3ROX
- ARE-ON
- CEN
- CENIC
- CIC
- FLR
- SOX
- FRGP
- GPN
- KanREN
- LEARN
- LONI
- MAGPI
- MARIA
- MAX
- MCNC
- MERIT
- MissiON
- MOREnet
- MREN
- WVNET
- NJEDGE
- NOX

- ***Regionals with, or acquiring, perfSONAR (cont):***

- NYSERNET
- OneNet
- Oregon GigaPoP
- PNWGP
- PeachNet
- UEN
- WiscNet

- ***Regionals with unsure status:***

- ABQG
- C-Light
- Indiana GigaPoP
- IRON
- KyRON
- MDREN
- Northern Lights
- OARnet
- OSHEAN



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ESnet



INDIANA UNIVERSITY

*Special thanks to perfSONAR partners for assistance in lesson material*