INTERNET2

August 11ᵗʰ 2014, APAN38
Network Performance Tutorial
John Hicks – Internet2

Requesting Help
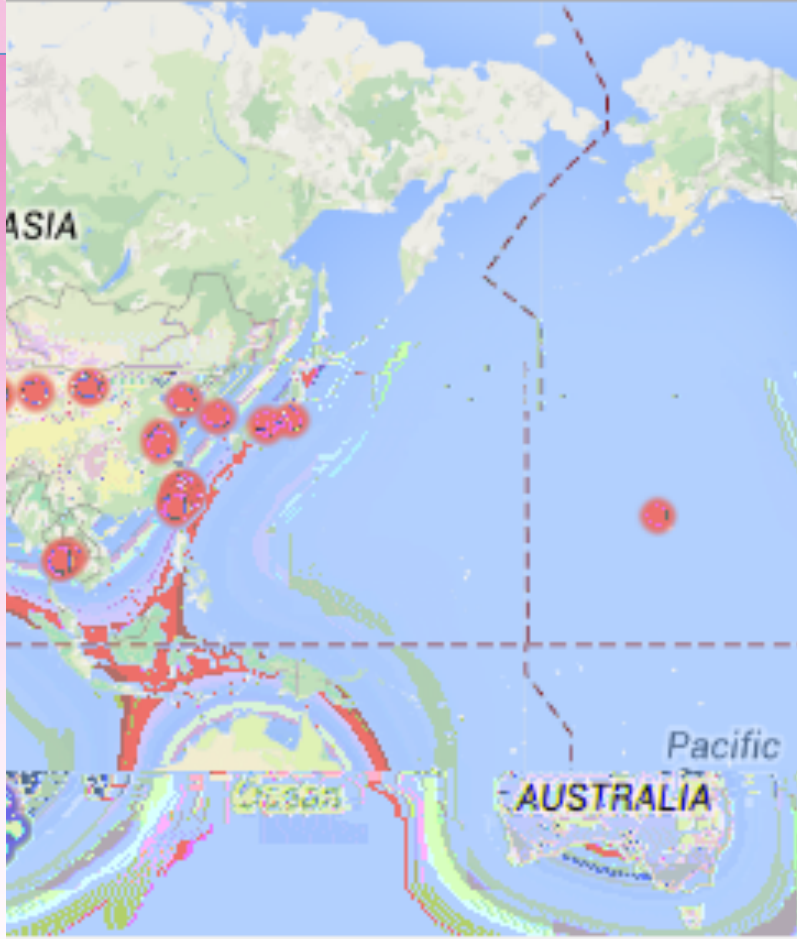
Outline

- Getting in Over Your Head

- XSEDE

- Internet2

- Regional Networks

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K. Benninger – benninger@psc.edu

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:
4 bwctl nodes, owamp nodes Jul '14

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XSEDE

- The central XSEDE help desk for trouble ticketing is help@xsede.org
- Identify your trouble-shooting team. Ideally includes the user seeing the problem and a site network engineer
- Contact 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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- 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
  - 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

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

- Regionals with no response
  - ABQG
  - C-Light
  - Indiana GigaPoP
  - IRON
  - KyRON
  - MDREN
  - Northern Lights
  - OARnet
  - OSHEAN

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Special thanks to perfSONAR partners for assistance in lesson material