

PACIFIC



W A V E

# Network Performance Monitoring and Measuring using perfSONAR

A panel with discussion  
CENIC 2012 Annual Conference  
Palo Alto, California  
March 13, 2012

# What is it?

## perfSONAR

- \* For those unfamiliar with the PerfSONAR project, it is a joint collaboration between ESnet, GEANT, Internet2 and RNP networks.
- \* It is described as being “an infrastructure for network performance monitoring, making it easier to solve end-to-end performance problems on paths crossing several networks.
- \* It contains a set of services delivering performance measurements in a federated environment. These services act as an intermediate layer, between the performance measurement tools and the diagnostic or visualization applications. This layer is aimed at making and exchanging performance measurements between networks, using well-defined protocols.”

# TLPW perfClub

- \* The IRNC project Translight/Pacific Wave created a “perfClub” to discuss implementation and upkeep issues.
- \* The TL/PW perfSONAR Club meets regularly once a month using teleconferencing. Alan Whinery (UH) is the liaison for TL/PW perfSONAR effort. He and Celeste Anderson (USC/CENIC) conduct the TLPW perfSONAR Club teleconference calls which include participants from the TL/PW project and representatives from several California campuses, AARNet, Internet2 and ESNet.

# TLPW perfClub participants

- \* AARNet
- \* Caltech
- \* CANARIE
- \* CENIC
- \* ESNet
- \* Indiana U. (Transpac)
- \* Internet2
- \* Los Nettos
- \* NASA
- \* NOAA/NCAR
- \* PNWGP
- \* Stanford
- \* UC Berkeley
- \* UC Los Angeles
- \* UC Santa Cruz
- \* UC San Diego
- \* Univ of Hawaii
- \* USC

# Who else is using it, or will be using it soon?

## Now

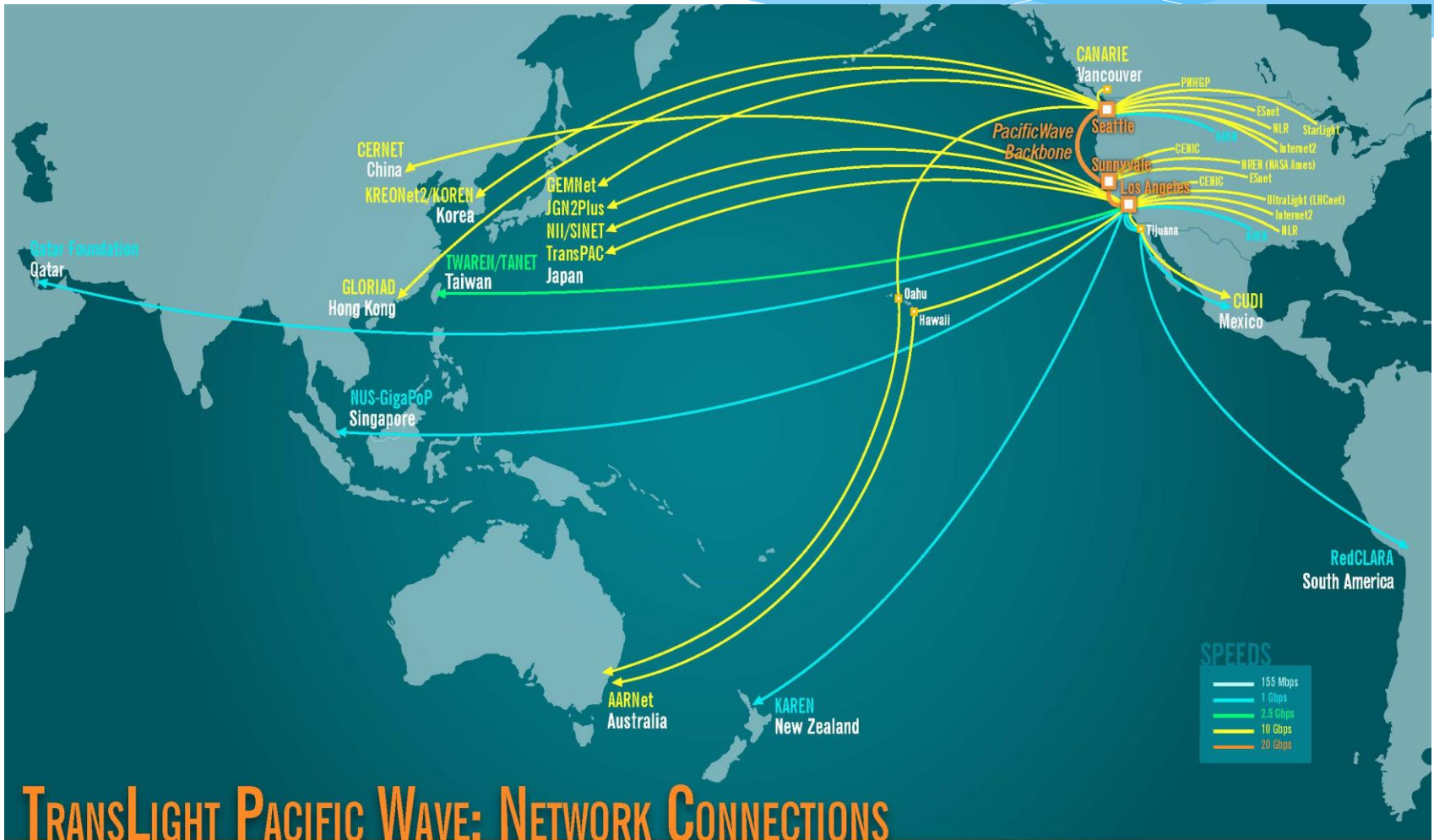
- \* AARNet (Australia)
- \* APAN-JP, JGN-X (Japan)
- \* KOREN, KREONET (Korea)
- \* ASGC, TWAREN (Taiwan)
- \* UniNet, ThaiSARN (Thailand)
- \* VinaREN (Vietnam)
- \* GEANT (Europe)
- \* RNP (Brazil)

## Soon

- \* PREGINET (Philippines)
- \* LEARN (Sri Lanka)
- \* MYREN (Malaysia)
- \* KAREN (New Zealand)
- \* TEIN PoPs (EU-ASIA)
- \* CERNET (China) via Transpac

# perfSONAR WeatherMap

- \* Try JGN-X/NICTs Google Earth application
  - \* <http://kote-ps-1.ps.jgn-x.jp/ps/ps-gearth/WeatherMap.php>
  - \* WEB: <http://kote-ps-1.ps.jgn-x.jp/ps/ps-gearth/>



# TRANS LIGHT PACIFIC WAVE: NETWORK CONNECTIONS

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- \* **PI: David Lassner** - University of Hawaii
- \* **Co-PI: Jim Dolgonas** - CENIC
- \* **Co-PI: Ron Johnson** - PNWGP
- \* **Co-PI: Ed Lazowska** - University of Washington
- \* **NSF Award** - [#0962931](#).

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