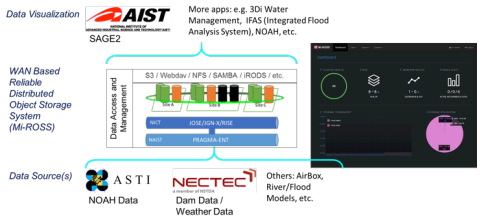
Reports fro
m Resources WG

Philip Papadopoulos (UCSC)
Yoshio Tanaka (AIST)

Integration of many “threads” of activity

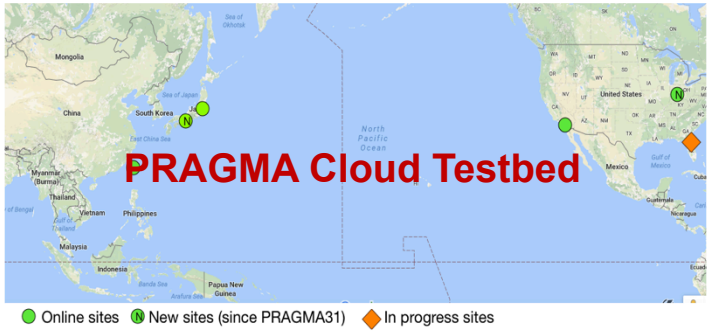


Software Defined Storage + Visualization

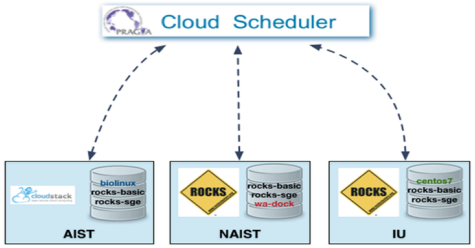
GRAPLEr lake modeling

AirBox

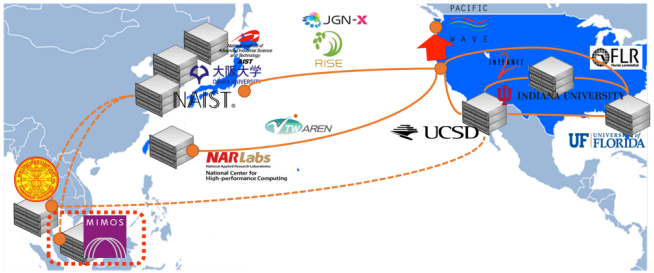
PerfSONAR



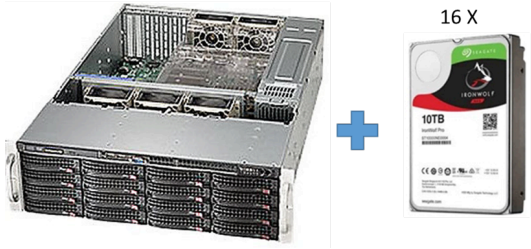
Cloud Scheduler



PRAGMA Clusters



PRAGMA-ENT



PRAGMA Storage

GPU

PRAGMA Cloud: Goals for PRAGMA 33

- Integrate Thammasat Cloud Scheduler GUI
- Finish Clonezilla repository integration with different drivers (e.g., Cloudstack)
- Add Openstack PRAGMA Boot driver
- UCSD will add GPU nodes.
- Finish PRAGMA-ENT integration and add more resources
  - Add resources from AIST and NCHC
  - Finish integration of University of Florida
  - Add UCSD Rockstar resource
- More applications
  - GRAPLEr lake modeling
  - Airbox virtual cluster image (CENTRA)

PRAGMA Cloud Storage

- Prepare 160TB S3 enabled storage
  - UCSD, AIST, UF (minimum). NICT (JOSE), (possibly NCHC)
  - Store data (e.g. AirBox)
  - Integrate with PRAGMA-ENT
  - Evaluate performance.
  - Nakagawa-san's experiments on PRAGMA Cloud Storage and demo @ PRAGMA33.
  - UCSD will figure out appropriate S3 software.
  - Need to consider Simple ID management.

Lifemapper: Research Projects

- **PRAGMA 33: NA flora/Comet** project (Charlie)
  - Work with SDSC to request enough Comet resources for Charlie job
  - Nadya and Aimee debug Comet job workflow, storage (June/July)
  - Nadya and Aimee complete computations **by PRAGMA 33**
- **PRAGMA 33: Taiwan** instance
  - Work with Fang Pang to find interested Taiwanese researchers
  - Aimee assemble high resolution environmental data, Taiwanese species occurrence data
  - Work with Taiwanese researchers to define biogeographic hypotheses
  - Nadya and Aimee travel to NCHC to deploy on OpenStack at NCHC (**July/ Aug 2017**)
  - Queryable dataset by PRAGMA 33

Life Mapper: New Technologies

- **PRAGMA 33: SAGE2 Visualization**
  - Work with Jason Leigh lab and other PRAGMA SAGE sites to install hardware and software at Kansas
  - Send LM programmer to work with Dylan Kobayashi at either Hawaii (May) or AIST (July)
  - Work with Dylan and Jason to create visualization tools for Global PAM or subsetted outputs, linked spaces in a browser (late summer 2017)
  - Small demo by PRAGMA 33
- **PRAGMA 33: PID proof-of-concept**
  - Work with IU to define data types and metadata/provenance to capture
  - Work with IU to create PIDs and catalog Taiwan-data PAM, metadata and related data types (no services)
  - Discuss results at PRAGMA 33

Life Mapper: Outreach/broaden community

- Develop session at PRAGMA 33 / eResearch Australasia on Lifemapper, to recruit biodiversity researchers from Australia to participate.
- Organize workshop of like-minded researchers looking to understand species along west coast of north and south America. (P Soltis)

Human resources

- Phil and Yoshio will step down from co-chairs.
- Will identify new co-chairs in few months.