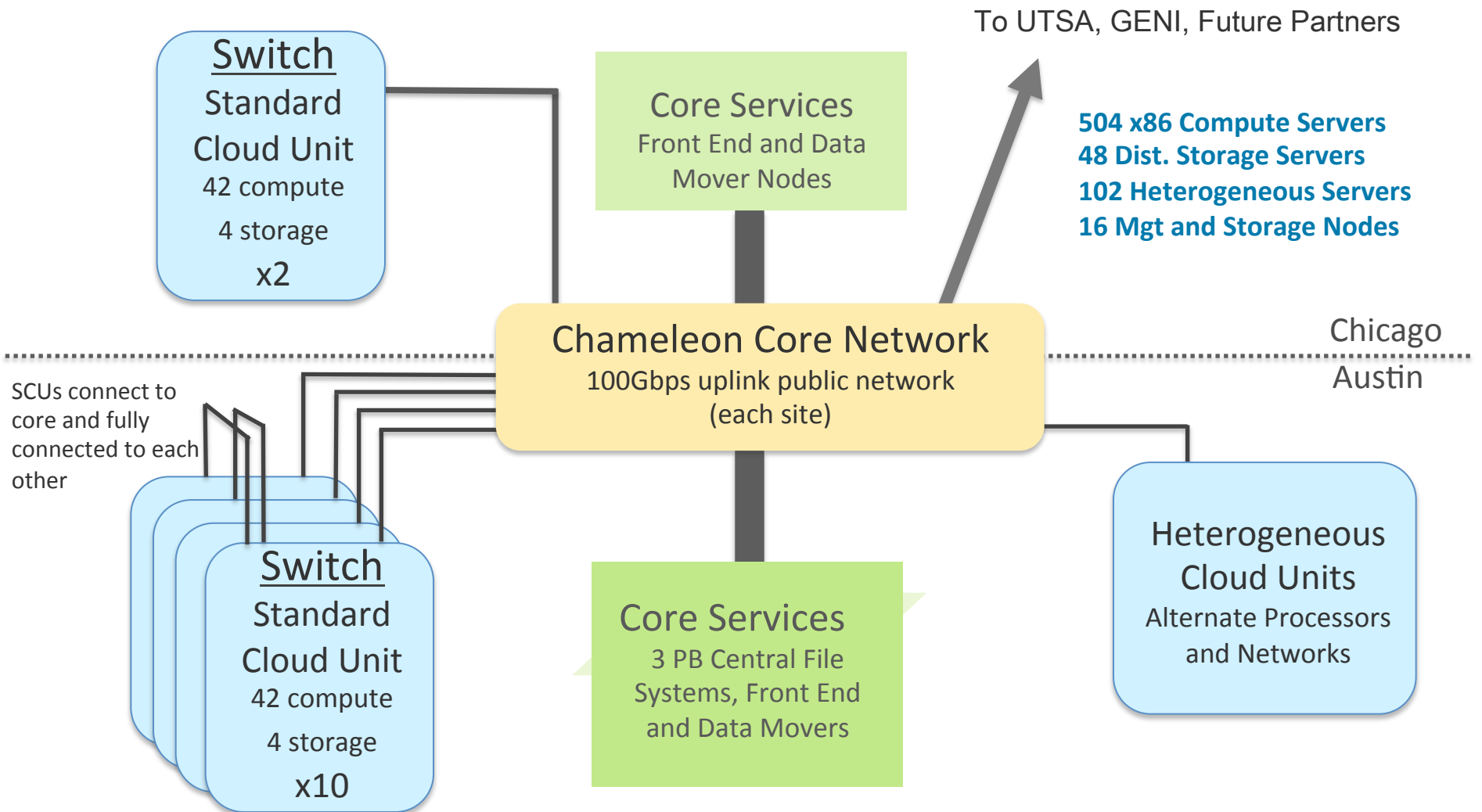


# CHAMELEON: A FLEXIBLE AND POWERFUL EXPERIMENTAL INSTRUMENT

- ▶ **Large-scale:** “Big Data, Big Compute, Big Instrument research”
  - ▶ ~650 nodes (~14,500 cores), 5 PB disk over two sites, 2 sites connected with 100G network
- ▶ **Reconfigurable:** “As close as possible to having it in your lab”
  - ▶ Bare metal reconfiguration, single instrument, Chameleon appliances
  - ▶ Support for repeatable and reproducible experiments
- ▶ **Connected:** “One stop shopping for experimental needs”
  - ▶ Workload and Trace Archive
  - ▶ Partnerships with production clouds: CERN, OSDC, Rackspace, Google, and others
  - ▶ Partnerships with users
- ▶ **Complementary:** “Can’t do everything ourselves”
  - ▶ Complementing GENI, Grid’5000, and other experimental testbeds

# CHAMELEON HARDWARE



# PROJECT SCHEDULE

- ▶ Fall 2014: FutureGrid@Chameleon (FG Hotel and Alamo with OpenStack) available since Fall 2014
- ▶ Spring 2015: Technology Preview bare metal reconfiguration available on FG hardware to Early Users
- ▶ Summer 2015: New hardware: large-scale homogenous partitions available to Early Users
- ▶ Fall 2015: New hardware and bare metal reconfiguration generally available
- ▶ 2015/2016: Refinements to experiment management capabilities, higher level capabilities
- ▶ Fall 2016: Heterogeneous hardware available

# GET INVOLVED

- ▶ Talk to us
  - ▶ Visit us at [www.chameleoncloud.org](http://www.chameleoncloud.org)
  - ▶ Pls: Kate Keahey, Joe Mambretti, D.K. Panda, Paul Rad, Warren Smith, Dan Stanzione
- ▶ FutureGrid@Chameleon
- ▶ Chameleon Early User Program
  - ▶ Committed users, driving and testing new capabilities, enhanced level of support and allocation
- ▶ Chameleon Advisory Bodies
  - ▶ Research Steering Committee: advise on capabilities needed to investigate upcoming research challenges (DK Panda)
  - ▶ Industry Advisory Board: provide synergy between industry and academia (Paul Rad)