

Hardware

National Institute for Computational Sciences (NICS): Computing Resources for the Future at the National Institute for Computational Sciences

Presented by

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Enabling Transformational Science



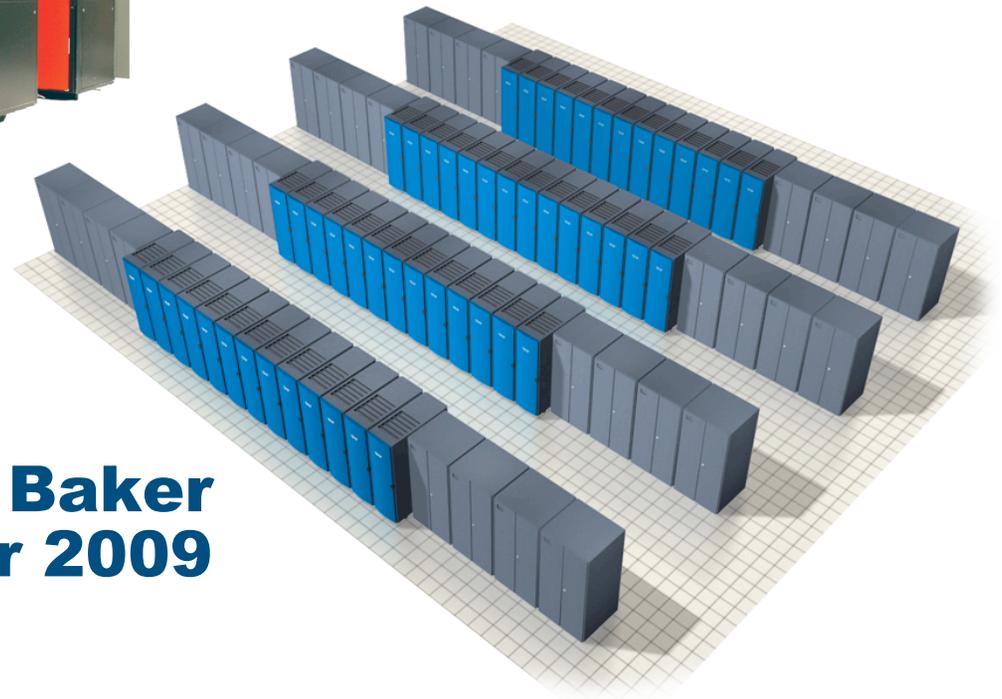
Proposed Cray 170 TF system



Schedule

November 2007	NSF access of DOE system
March 2008	Delivery of XT4
May 2008	In production
2009	Delivery of "Baker" system
2010	Upgrade "Baker" CPUs

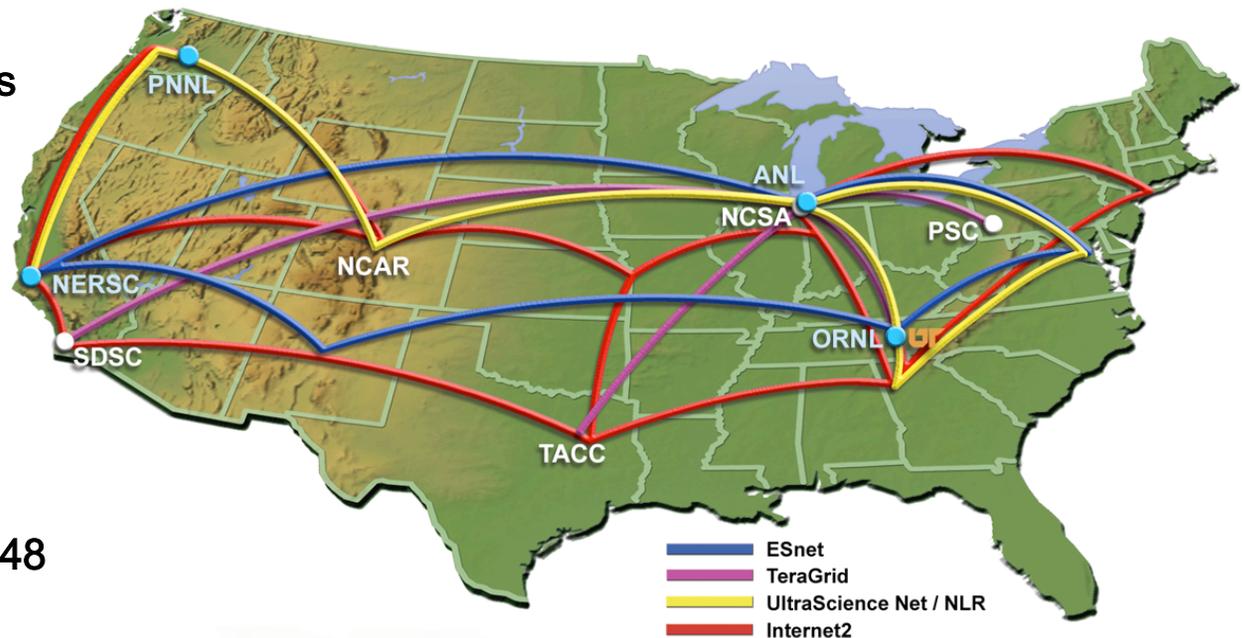
Proposed Cray Baker system for 2009



Networks



- 20-year IRU on dark fiber to Atlanta and Chicago
- Capability of up to
 - 192 10 Gb/s connections
 - 96 40 Gb/s or 100 Gb/s connections
- Connected to every major research network
 - TeraGrid: OC-192
 - Internet2: OC-192
 - CHEETAH: OC-192
 - ESnet: OC-192 with OC-48 backup link
 - UltraScience Net: 2xOC-192
 - Gloriad: OC-192
 - NLR: 2xOC-192



Facilities Computer Center

Part of a three-building 365,000 ft² complex built in 2003

- 35,670 ft² building
- Includes 40,000 ft² raised-floor computer room on two floors
- Staffed 24/7/365 by operators, security, electricians, and HVAC mechanics



Joint Institute for Computational Sciences Building



- 50,000 ft² building
- Offices, classrooms, and laboratories
- Distance-learning infrastructure



Contact

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