

A /ORNL PARTNERSHIP
NATIONAL INSTITUTE FOR COMPUTATIONAL SCIENCES

NICS



Kraken NSF's Petascale Resource at NICS

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National Institute for Computational Sciences



- NICS is a collaboration between the University of Tennessee and ORNL
- Awarded the NSF Track 2B (\$65M)
- Phased deployment of Cray XT systems (culminated in 1 PF in October 2009)
- First academic PF computer



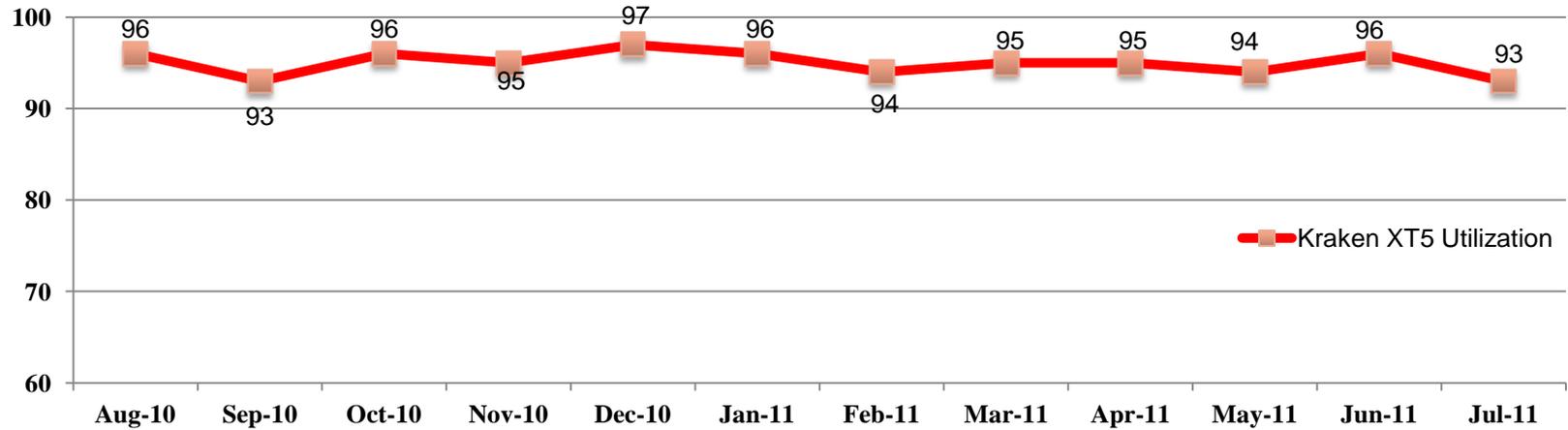
Cray XT5 system – January 2011

- 18,816 six-core 2.6 GHz AMD Istanbul processors
- 147 TB memory
- 1,174 teraflops
- 3.3 Petabytes DDN disk (raw)

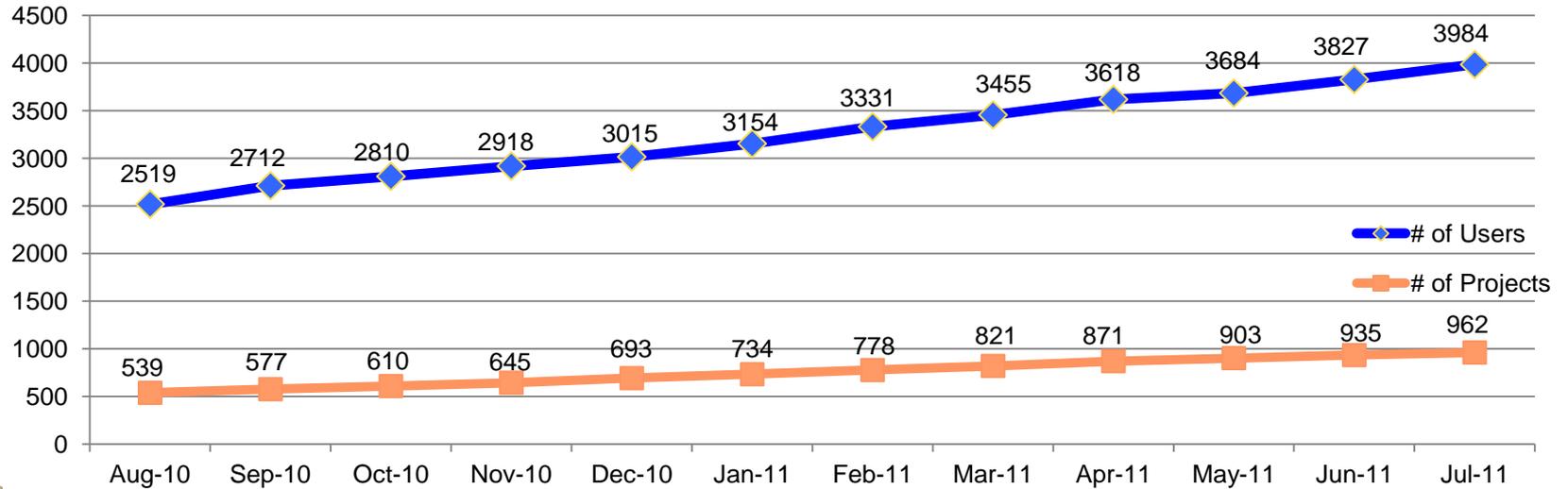


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Utilization



Accounts and Projects



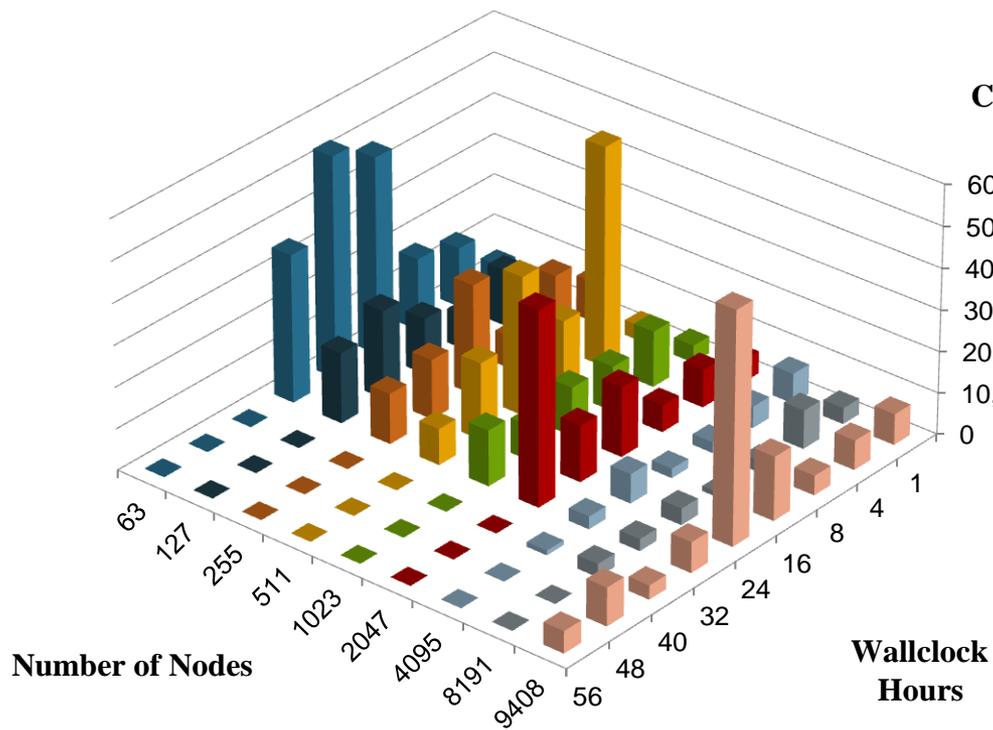
Kraken Job Mix

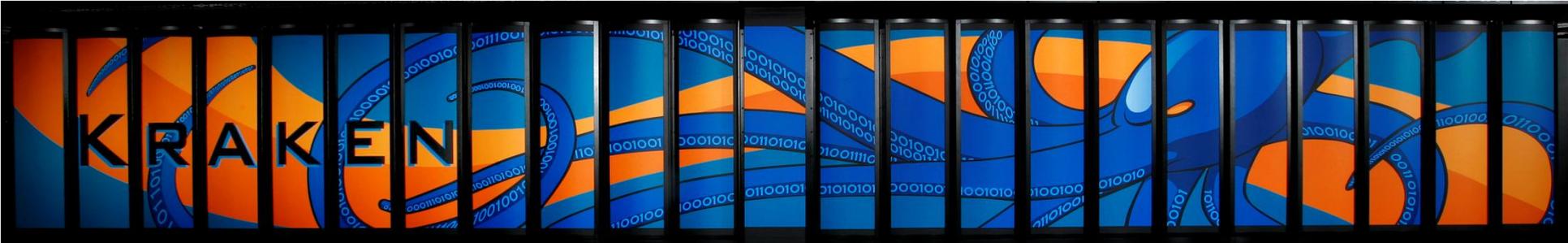
Number of Nodes

- 63
- 127
- 255
- 511
- 1023
- 2047
- 4095
- 8191
- 9408

Core-Hours

- 60,000,000
- 50,000,000
- 40,000,000
- 30,000,000
- 20,000,000
- 10,000,000
- 0





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