

JOWOG34

Sandia Site Report

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Sandia is a multiprogram laboratory operated by Sandia Corporation, a Lockheed Martin Company, for the United States Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000. SAND -2005-6648P



Lot's of change

- **Merle Benson retires**
- **Bill Camp retires**
- **Ron Detry retires**
- **Ken Washington departs**
- **ASC program restructured (internally)**
- **Research budget significantly impacted**
- **Effort centralize of procurement of capacity systems across labs (Matt's talk)**
- **Serious debate over rotation for capability systems**
- **ASCI Red retired after 9 years of service (in Top 500)**



Some major accomplishments

- **Red Storm upgraded to 125TF (5 rows, dual core) ... #2 on Top 500 @ 101.4TF**
 - general availability March 26th (ready in September '06)
 - plan to add 1PB storage (currently 170TB each end)
 - possible memory upgrade to take each node to 8MB
 - upgrade path to quad core XT4
- **Thunderbird SW stack ... #6 on Top 500 @53TF ~40% > peak; ~20% > throughput**
 - 10Gbps upgrade to DISCOM network completed
 - Ethernet over DWDM
 - Sustaining ~200MB/s over network in tests
 - 400MB/s from LANL to Red Rose
 - 650MB/s from Red Storm to Red Rose disk
 - Create restart files on Red Storm at 8GB/s
- **Full ISO certification of desktop support**
- **Michael Dell visit**



Optimistic about the future

- **Executive leadership focusing on HPC**
- **Strategic focus on Engineering Transformation and Operational Excellence**
- **Institutional model for classified computing**
- **Call for major investment in ITS capacity computing**
- **Orange network funded and commenced**
- **Common Engineering Environment under design**
- **New Mexico supercomputing center funded**
- **Competed for NSF platform in partnership with Intel and PSC**
- **New cyber security doctrine under development**