

# Sandia National Laboratories IT Status & Update 2008 NLIT Summit

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# Sandia Corporate IT Services

- 2 NM Organizational Centers + 1 CA Center:  
Applications; Computing Services and Support
- 7 Geographically-based Computer Support Units + CA  
+ Special Projects CSU (3 Contracting Companies)
- 1 Central Computing Help Desk (Remedy ARS)
- 3 (primary\*) network environments (Open, Restricted,  
Secure)
- 34,000 Networked devices tracked in 1 Network  
Information System (NWIS) Database
- 11,500 Highly creative users - each entitled to support  
for 1 corporate desktop & 1 laptop



# IT “Highlights” from 2008

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- **Deployments**

- **Credant (Mobile Encryption):** Laptop and removable media encryption
- **KBOX:** Deployment, Patching, Inventory
- **Vista / IE7 / Office 2007**
- **SAMS**
- **Exchange 2007 & Live Communicator 07**
- **Sharepoint 3.0**
- **Portal move from Oracle to JBOS**



# More IT “Highlights” from 2008

- **Mobility**
  - **Remote Access:** “Sandia Anywhere” upgraded using Juniper appliance (improved security and functionality)
  - **Blackberry expansion**
  - **Hardening efforts:** Credant, LOFT, 2-Factor / Cryptocards
  - **Business Need Justification Requirement** for all mobile devices.



# Yet More IT “Highlights” from 2008

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- **Security**
  - **2-Factor Authentication:** Required for all Remote Access (E-mail, Sandia Anywhere, Remote Desktop, Reverse Proxy, VPN)
  - **LOFT Evolution**
  - **Bluecoat:** Web Content Filtering
  - **Classified Diskless Initiative Endgame**



# Even More IT “Highlights” from 2008

- High Performance Computing
  - Expect total on-site HPC to exceed 0.5 Petaflops by the end of the year.
  - Collaboration with other DOE Sites
  - Parallel Apps on Clusters: MatLab, other Engineering Apps
- Operational Excellence
  - ITIL, CMMI, ISO9000, Lean Six Sigma, RUP
  - Enterprise Configuration Management



# Still More IT “Highlights” from 2008

- **Networks**
  - **VOIP for Offsite Worksite (800 people)**
  - **Orange Network:** Below SRD Classified with connections to SIPRnet
  - **Remote Access:** Juniper Appliance
  - **DRBC:** Using SNL/CA site, Asynchronous Mirroring, Virtualization - Fast/Flexible Recovery
  - **ESN (Enterprise Secure Network):**
  - **YMP & Offsite Buildings:** YMP, IPOC, CSRI, CINT



# Issues in 2008

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- **New Facility Support**
  - MESA, CINT, CSRL, IPOC
- **Pressure on Corporate Indirect Support for Services (including IT).**
- **External Benchmarks**
- **Electricity Cost Increases (Green Computing Initiative)**
- **Cyber Security Threats: Zero-Day Exploits**
- **SW Vendor Audits**





# On the Horizon ...

- Vista & Office 2007 deployments - Labwide in FY'09
- FDCC and Granularity of admin rights on desktops
- **Corporate Servers**
  - Server Virtualization (VMware)
  - 64-bit servers
  - Linux servers playing a larger corporate role
- **SAMS - Software Acquisition & Management System**
- **Thin Desktops, Virtualization, and Application Streaming**
- **Enterprise Information Management: FileNet, OmniFind, Sharepoint/Email Connectors, Content Management**
- **MS RoundtableVideoconferencing**