



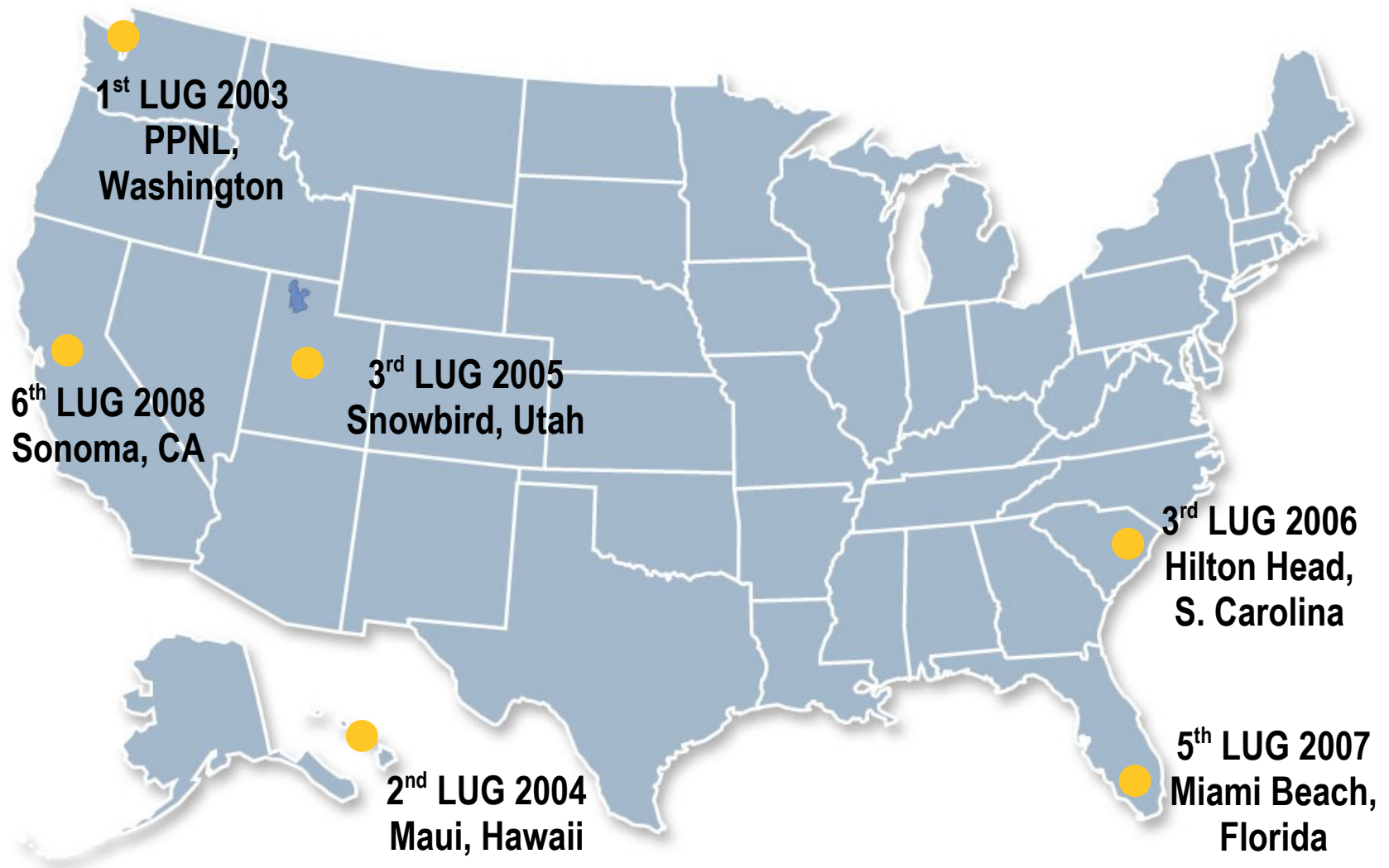
# LUSTRE USER GROUP WELCOME

**April 28, 2008**

**Peter Bojanic**  
Director Lustre Group  
Sun Microsystems, Inc.

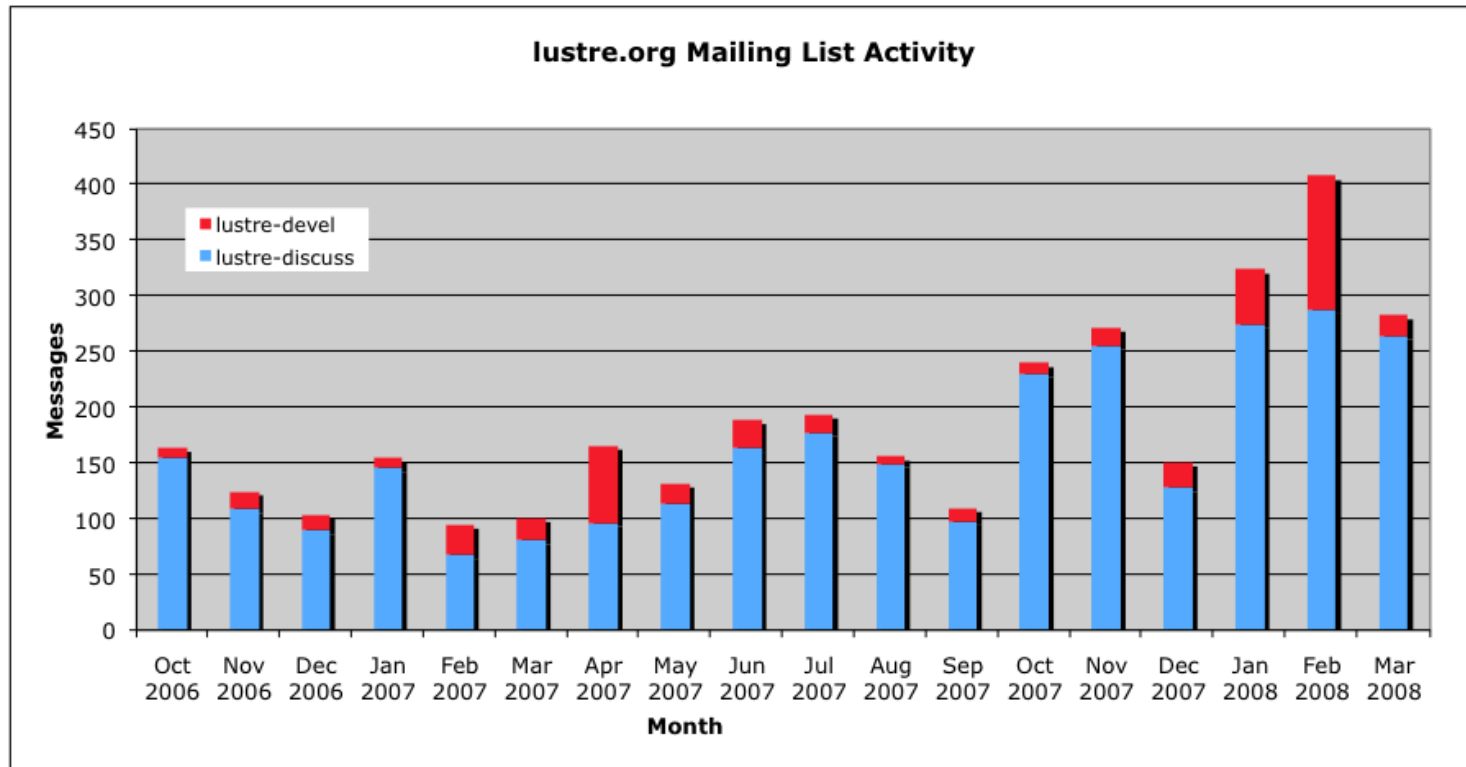


# Welcome




# Lustre Community Participation

Location	Total Registrants	Lustre Group	Sun	Other paid registrants	Organizations
Miami Beach, FL	68	9	1	58	40
Sonoma, CA	124	23	10	91	51



# Thank You

- Sponsor  DataDirect  
NETWORKS
- Andy Bechtolsheim keynote presentation 9am Tuesday
- Zhang Yun and Karen Li for coordinating the event
- Our users, including customers and partners, for taking the time to participate

# CFS Acquisition

- Oct 1, 2007 the Sun acquisition of CFS closed
  - > The theme is continuity
  - > All employees, partners or customers were retained
- Lustre remains open source under GPL
  - > All designs and the internals course are on lustre.org
  - > CVS is open
  - > Architecture discussions now on lustre-devel
- Sun continues to work with CFS partners
  - > Foster Lustre community and encourage more partnerships
  - > No special versions of Lustre for anyone

# First 6 Months at Sun

- Business and process integration
- Establishing firewalls to protect the interests of our partners
- Networking with product and operational groups
- Establishing a Lustre ecosystem
- Sun is a good fit for the Lustre Group!

# Lustre Group

## All of the same CFS crew

- Here this week: Eric Barton, Peter Bojanic, Peter Braam, Kevin Canady, Nikita Danilov, Andreas Dilger, Oleg Drokin, Jessica Johnson, Peter Jones, Bryon Neitzel and many engineers

## Several new players

- Dan Ferber, Shailu Gargeya, Hua Huang, Nirant Puntambekar, Mallik Ragampudi, Robert Read, Terry Rutledge
- New HPC Software Stack team: Larry McIntosh, Makia Minich, [Or Gerlitz]

## Unprecedented LUG participation by Lustre engineers

- More than 10 Lustre Engineers here this week
- *Lustre Expertise* session on Tuesday

# Partners





# Lustre Community

## The Lustre Community continues to thrive

- Strong support by Sun

## Lustre Centres of Excellence

- CEA – Data Management
- LLNL – Site Wide Filesystem
- NRL – Wide Area Lustre
- ORNL – Petascale deployment

## Ambitious community efforts

- HSM development effort led by CEA
- Linux ZFS/DMU research with LLNL
- WAN project discussions in progress

# Accomplishments in 2007

- Lustre 1.6.0 including patchless clients
- Metadata performance improvements
- Smoking fast disk allocator
- Fast fsck & format
- LNET diagnostic self test
- Improved release management and test processes

# Top Lustre Group Goals for 2008

## HEAD to good

- Fix bugs; release Lustre 2.0

## Lustre on ZFS/DMU

- DMU performance; Solaris; user space servers

## Understand our product better

- Benchmarking; API (re-)structuring; documentation

## Predictable execution

- Estimates, planning, branch/gate control

## Global support and service

- Professional services; 24x7 support around the world

# What to Expect in 2008

- Lustre on ZFS/DMU
  - > Elimination of server kernel patches
- Recovery and metadata improvements
- Security – GSS/Kerberos
- Replication and change logs
- Network Request Scheduler
- Scalability improvements
- Community progress on HSM support
- In general, a maturing Lustre
  - > Sufficiently robust for global file systems

# Agenda

TIME/DATE	APRIL 28 MONDAY	APRIL 29 TUESDAY	APRIL 30 WEDNESDAY
8 AM - 9 AM	BREAKFAST	BREAKFAST	BREAKFAST
9 AM - 9:30 AM	Welcome & Introduction - Peter Bojanic, Director, Lustre Group, Sun	Keynote speaker - Andy Bechtolsheim	Joint CEA/NNSA BoF on PetaScale I/O Issues
9:30 AM - 10 AM	Lustre Business Update - Kevin Canady, Director of Business Development, Sun	Scientific Application Performance with Lustre - Tom Wang, Lustre Group, Sun	
10 AM - 10:30 AM	Lustre Engineering Update - Eric Barton, Lustre Lead Engineer, Sun	Lnet Selftest - Isaac Huang, Lustre Group, Sun	HPC Software Stack for Linux - Makia Minich, Lustre Group, Sun
10:30 AM - 11 AM	COFFEE BREAK		
11 AM - 11:30 AM	Lustre Talk: TBD	- BoF on Lustre over WAN - Eric Barton, IU, ORNL, TACC	Lustre Technical Panel
11:30 AM - 12 AM	Peter Braam, VP of Lustre, Sun		- Eric Barton, Shane Canon, Steve Simms
12 AM - 1 PM	LUNCH		WRAP UP
1 PM - 1:30 PM	Lustre Roadmap Update - Bryon Neitzel, Lustre Group, Sun	Lustre Tools Session - Backup & Quota - Nicholas P. Cardo, LBNL	
1:30 PM - 2PM		Lustre Tools Session - Shine, Administration Tool - Stephane Thiell, CEA	
2 PM - 2:30 PM	Lustre at LLNL - Marc Stearman, LLNL	Lustre Partner : DataDirect Networks - Dave Fellingner, DDN	
2:30 PM - 3 PM	COFFEE BREAK		
3 PM - 3:30 PM	A Global File System with Lustre & LNET Routers - Shane Canon, ORNL	Lustre Expertise Session 1. Userspace Server Architecture - Alex Zhuraviev 2. Lustre on ZFS - Ricardo Correia 3. NFS/pNFS export - Oleg Drokin 4. Lustre Clustered MetaData (CMD) - Andreas Dilger 5. Metadata Server Stack - Nikita Danilov 6. Metadata Performance with Size on MDS - Vitaly Fertman	
3:30 PM - 4 PM	DARPA HPCS Project - John Carrier, Cray		
4 PM - 4:30 PM	ILM - Lustre HSM - Aurelien Degremont, CEA		
4:30 PM - 5 PM	Customer Support & I/O Applications from a LLNL Perspective - Richard Hedges, LLNL		
6 PM - 8 PM	EVENING RECEPTION		



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