

LISA '13:
27th Large Installation System Administration Conference
November 3–8, 2013
Washington, D.C.

Message from the Program Co-Chairs v

Wednesday, November 6

Building Software Environments for Research Computing Clusters1
Mark Howison, Aaron Shen, and Andrew Loomis, *Brown University*

Fixing On-call, or How to Sleep Through the Night7
Matt Provost, *Weta Digital*

Thursday, November 7

Poncho: Enabling Smart Administration of Full Private Clouds17
Scott Devoid and Narayan Desai, *Argonne National Laboratory*; Lorin Hochstein, *Nimbus Services*

Making Problem Diagnosis Work for Large-Scale, Production Storage Systems27
Michael P. Kasick and Priya Narasimhan, *Carnegie Mellon University*; Kevin Harms, *Argonne National Laboratory*

dsync: Efficient Block-wise Synchronization of Multi-Gigabyte Binary Data45
Thomas Knauth and Christof Fetzer, *Technische Universität Dresden*

HotSnap: A Hot Distributed Snapshot System For Virtual Machine Cluster59
Lei Cui, Bo Li, Yangyang Zhang, and Jianxin Li, *Beihang University*

Supporting Undoability in Systems Operations75
Ingo Weber and Hiroshi Wada, *NICTA and University of New South Wales*; Alan Fekete, *NICTA and University of Sydney*; Anna Liu and Len Bass, *NICTA and University of New South Wales*

Back to the Future: Fault-tolerant Live Update with Time-traveling State Transfer89
Cristiano Giuffrida, Călin Iorgulescu, Anton Kuijsten, and Andrew S. Tanenbaum, *Vrije Universiteit, Amsterdam*

Live Upgrading Thousands of Servers from an Ancient Red Hat Distribution to 10 Year Newer Debian Based One105
Marc Merlin, *Google, Inc.*

Managing Smartphone Testbeds with SmartLab115
Georgios Larkou, Constantinos Costa, Panayiotis G. Andreou, Andreas Konstantinidis, and Demetrios Zeinalipour-Yazti, *University of Cyprus*

YinzCam: Experiences with In-Venue Mobile Video and Replays133
Nathan D. Mickulicz, Priya Narasimhan, and Rajeev Gandhi, *YinzCam, Inc. and Carnegie Mellon University*

Friday, November 8

Challenges to Error Diagnosis in Hadoop Ecosystems145
Jim (Zhanwen) Li, *NICTA*; Siyuan He, *Citibank*; Liming Zhu, *NICTA and University of New South Wales*; Xiwei Xu, *NICTA*; Min Fu, *University of New South Wales*; Len Bass and Anna Liu, *NICTA and University of New South Wales*; An Binh Tran, *University of New South Wales*

Installation of an External Lustre Filesystem Using Cray esMS Management and Lustre 1.8.6155
Patrick Webb, *Cray Inc.*