



conference

proceedings

Proceedings of the 2014 USENIX Annual Technical Conference

2014 USENIX Annual Technical Conference

Philadelphia, PA, USA
June 19–20, 2014

Philadelphia, PA, USA June 19–20, 2014

Sponsored by



Thanks to Our USENIX ATC '14 Sponsors

Gold Sponsors



Silver Sponsors



Bronze Sponsors



Media Sponsors and Industry Partners

Distributed Management
Task Force (DMTF)
Enterprise Tech
HPCwire

InfoSec News
LXer
No Starch Press
O'Reilly Media

UserFriendly.org
Virus Bulletin

© 2014 by The USENIX Association
All Rights Reserved

This volume is published as a collective work. Rights to individual papers remain with the author or the author's employer. Permission is granted for the noncommercial reproduction of the complete work for educational or research purposes. Permission is granted to print, primarily for one person's exclusive use, a single copy of these Proceedings. USENIX acknowledges all trademarks herein.

ISBN 978-1-931971-10-2

Thanks to Our USENIX and LISA SIG Supporters

USENIX Patrons

Google Microsoft Research NetApp VMware

USENIX Benefactors

Akamai Facebook Hewlett-Packard
Linux Pro Magazine Puppet Labs

USENIX and LISA SIG Partners

Cambridge Computer Google

USENIX Partner

EMC