

# DHCP Update: 4.1.0 and Beyond

USENIX LISA

San Diego

November 2008



# DHCP 4.1.0: general

- Failover
  - Documented in i-d, not standard
  - Improves resilience
  - Has been hard to get right
    - Incomplete specification
    - Complex failure modes
- Delayed ack
  - Multiple updates on one fsync()
- chroot/setuid (can run in jail)

# DHCP 4.1.0: IPv6 support

- dhcrelay
- DHCPv6 leasequery support
- Basic prefix delegation
- Initial port of MacOS client
- Multiple daemons (multiple interfaces)

# DHCP 4.2.0 and Beyond

- DHCID RR (already in BIND) to replace update of TXT record
- Port to Linksys Linux-based router
  - Smaller footprint
  - Lower maintenance effort
- Integrated v4/v6 client
- NTP and timezone options
- “Always Unicast”
  - for improved Windows performance

# DHCP Future Development

- Getting to the end of initial DHCPv6 development
- Tighter integration with BIND
  - Common database structure
  - Dynamic update improvements
- Asynchronous update
- Closer community relationships
- \$Your\_Idea\_Here



# Contact

- Suzanne Woolf, product manager,  
[woolf@isc.org](mailto:woolf@isc.org)
- David Hankins, principal architect,  
[dhankins@isc.org](mailto:dhankins@isc.org)
- Alan Clegg, training and support  
[aclegg@isc.org](mailto:aclegg@isc.org)

