

DHCP Forum Meeting

LISA Conference

Dallas, November 2007



Agenda

- Welcome
- Overview of DHCP Forum
- DHCP v3
- DHCP v4
- Roadmap for BIND
- Questions



DHCP Forum overview

- Part of ISC's Software Guild
- Main goal is to support ISC in the development and maintenance of DHCP
 - Through membership fees
 - Through participation as a dhcp-worker
- Specific new features are usually developed through direct funding of interested parties



DHCP Forum overview

- Available mailing lists
 - df-discuss list, for discussions among DHCP forum members.
 - Input for ISC
 - dhcp-workers, a discussion list intended for contributors (ISC and otherwise)
- Member web site (<http://dhcpforum.isc.org>)
 - Functionality depending on tier
 - Access to early release of the code, before general release
 - Access to CVS tree (read-only)



DHCP Forum overview

- Security vulnerabilities announced and patch issued to members that choose that option before general public availability
 - Vendors have time to prepare system upgrades
 - Admins have time to fix their systems
- Complete information at <http://www.isc.org> or ask us



DHCP v3

Current version is v3.1.0

- Much improved failover
- Support for DHCP Leasequery option
- Support for VIVCO/VIVSO options
- new configuration functions, including "execute()", from inside a configuration file



DHCP v4

- DHCP 4.0 is in beta now
 - Implements DHCPv6 (for IPv6) in addition to what is already there
 - Mostly complete
 - A few options are not yet supported and there is no relay functionality yet
 - Implementation sponsored by Comcast
 - Try it! Available from ISC's web/ftp and mirrors



The Future

- All new feature development will take place in the 4.x train.
- No 3.2 release



The Future

- Currently intended for 4.1
 - DHCPv6 relay
 - Sub-second accuracy with timers
 - user-class and vendor-class support
 - IA_TA
 - Support for issuing temporary addresses.
 - Server-initiated messages
 - This is a new paradigm for DHCP. In DHCP on IPv4 all messages are client-initiated. In DHCPv6, the server can initiate messages.
 - The client side also needs to support the server-initiated messages.



The Future

- Other desirable RFCs:
 - 3633 (Prefix Delegation, IA_PD)
 - 4704 (FQDN)
 - 4833 (timezone option)



BIND 9.5

- New features
 - Server Statistics
 - GSS-TSIG (member sponsored devel.)
 - SHA-256 (member sponsored)
 - NSEC 3 (pending RFC acceptance)
 - LRU cache cleaning



BIND 9.6

- Tentative list of features
 - New resolver library
 - Meaning: separate the resolver library from BIND and re-implement parts
 - Based on work by Jinmei Tatuya of Toshiba
 - Online re-signing for DNSSEC
 - Epsilon online signing(?)
 - SQL based backends



Questions

