

Bill Manning

Areas of Expertise

- Internet infrastructure management
- DNS operations and development
- Instrumentation and auditing

Projects

Bill Manning is a principal in EP.NET, LLC, a company dedicated to the assignment of unique identifiers for participants at telecommunication exchanges and funded the primary development of the UNBOUND resolver. Concurrently, he serves as a member of the research staff at USC's Information Sciences Institute, where he is principal investigator for the NSF LACE project. He has also served as a project manager on USC/ISI's brittle audit of the in-addr. arpa space and as operator of the INT. domain, L and B root servers. As a RA project manager there, he developed, deployed, and productized Internet exchange points and managed the programming team for the routing policy system language (RPSL) and route server daemon (RSd). Other projects at ISI involved running the RS.NET testbed – evaluating Ipv6 transport, IDN capabilities, and DNSSEC key management from 2001-2006. He currently is the program manager for the B root server and sits on the ICANN RSSAC committee.

Mr. Manning also acts as a director for OCHER networks, a submarine cable company, and consults for Dupont, Enron, G.E., PLDT, and China Telecom.

For the U.S. Presidential Council on Y2K Transition, he acted as Internet DNS system liaison. For IANA, he helped define the current Internet DNS root structure, allowing thirteen servers instead of the original nine.

At Texas Instruments, Mr. Manning was responsible for the deployment of IP networking, first in the company's semiconductor division and then throughout the corporation. He worked with MERIT to expand the NSFnet Regional Tech conference into NANOG, the North American Network Conference.

At Rice University, he worked as lead engineer for the NSFnet's SESQUINET regional network, then oversaw migration of SESQUINET and MIDnet from the NSFnet to commercial networks. He was then asked to assume a role in the NSF Routing Arbitor project at ISI.

Associations

Mr. Manning serves on the technical advisory boards of i-dns, and ultraDNS. He is a

technical advisor for UltraDNS, i-DNS, ICANN, and has served as ARIN Board Trustee, and a member of IEEE, ACM, USENIX, APIA, and ISP/C.

He has been active in IETF's DNS and Routing working groups, as active participant, working group chair, and code developer. He specified how to add NSAP support to the DNS, developed and implemented a plan to expand the Internet root server system to add four new nodes, and continues to work on enhancing DNS code to track the growth of IP networks. With IPv6 developers and implementers, he manages the IP6.INT domain—the functional equivalent of the in-addr.arpa zone.

Conferences

Mr. Manning has attended IETF as participant and has served as WG chair for the PIER, ROUTING, and DNS-Next segments of the conference. He has spoken regularly at RIPE/EOF, INET, and at APRICOT, where he served on the conference's executive committee. He has also served on the advisory council for NANOG, and attended the APNG, SIGCOM AFNOG, and Afrinic conferences.

Bibliography

Mr. Manning is the author of numerous RFCs, articles, and papers. His publishing credits include :

RFC 1706, DNS NSAP Resource Records, B. Manning and R. Collela, October 1994

RFC 1746, Ways to Define Users Expectations, B.Manning and D. Perkins, December 1994

RFC 1878, Variable Length Subnet Table, T.Pummill and B.Manning, January 1996

RFC 2010, Operational Criteria for Root Name Servers, B.Manning, and P.Vixie, October 1996

RFC 2042, Registering New BGP Attributes, B.Manning, January 1997

RFC 2929, DNS IANA Considerations, Eastlake, Brunner-Williams, Manning, September 2000