

AFTR Forum

March 24, 2010

IETF 77

Anaheim, CA



What is ISC?

- Internet Systems Consortium, Inc.
 - 501(c)(3) Non-profit, public benefit corporation
 - Headquartered in Redwood City



ISC's Mission

- Develop, maintain & support production quality open source software, such as BIND, DHCP & AFTR
- Enhance the stability of the global DNS through reliable F-root nameserver operations, support & training for our software



ISC's Mission

- Further protocol development efforts in the areas of DNS evolution, specifically DNSSEC and facilitating the transition to IPv6



Who is ISC

- Paul Vixie, Founder & President
- Team of experienced software engineering and development staff recognized as leaders in the DNS & DHCP community
- Operations staff experienced in the running and maintenance of global presence with 100% uptime requirements supporting IPv4 & IPv6 natively.

We've all heard the news...

- Unallocated IPv4 is running out
 - Gone in 2012? Sooner?
 - Functionally already gone for large network operators
- Applications aren't IPv6-enabled
- Content providers are mixed at best
- ISPs/access providers have to bridge the gap

IPv4-IPv6 co-existence

- A variety of technologies being discussed
- Some people think we'll just do more
 - IPv4 NAT, or NAT64/DNS64
 - dual-stack
- We're here to talk about dual-stack lite:
 - <https://datatracker.ietf.org/doc/draftietf-softwire-dual-stack-lite/>



Dual Stack Lite Protocol

- Allows IPv4 applications behind IPv6 CPE to communicate with IPv4 servers and peers over IPv6 infrastructure
- One AFTR (“Address Family Transition Router”) can handle many clients
 - Tunnel over IPv6 infrastructure
 - NAT to IPv4

AFTR 1.0 Overview

- Proof of concept implementation of Dual Stack-lite protocol
- AFTR in user mode, commodity hardware/OS
- B4 on commodity home gateway - Support for A+P, no-NAT pass-through

AFTTR 1.0 Limitations

- No UPnP
- No customer-initiated port forwarding
- Configuration



AFTR 1.1 Roadmap

Features anticipated for AFTR 1.1
(to be released late in Q2 2010):

- UPnP
- Web portal, XML back-end
- Admin log tools
- Improved documentation

AFTR 1.2 Planning

- Comcast leading Field Trial late 2010
- 1.2 Release to follow
- Focus on optimization and performance improvement based on issues found in field trial



AFTR in the Community

In order to foster community, ISC has created the following communication tools for AFTR supporters, users, and friends:



AFTR Trac Site

Trac site with:

- Subversion code repository for community viewing
- Bug submission, with visible, searchable bug repository
- AFTR community Wiki

<http://aftr.isc.org>

AFTR Mail Lists

Open community email lists:

- aftr-announce@lists.isc.org
- aftr-users@lists.isc.org



AFTR Development Model

Managed Open Source

- ISC dedicated engineers
- ISC Product Manager
- Community participation
 - Product planning
 - Testing & Feedback

AFTR Funding Model

- Comcast initial project sponsor
 - Funding
 - Project direction
- AFTR now maintained by ISC
 - Developers
 - Resources
- Community Participation
 - Code
 - Resources
 - Funding
- *AFTR Forum*

ISC AFTR Forum

- Primary funding vehicle
 - Donations
 - Membership
 - Directed development
- Membership Levels with different fees and benefits

Forum Memberships

Benefit	OEM	Sponsor	Worker	User
Forum Mailing List				
Trac Site Access				
Quarterly Tech Chats				
Developer Meetings				
Acknowledgement of Sponsorship				
Feature Priority Planning				
Engineering Integration Support				

Join the AFTR Forum:

<https://www.isc.org/software/guild/aftr>





Questions?

Thank you for your support

Please share your contact information with us before leaving.