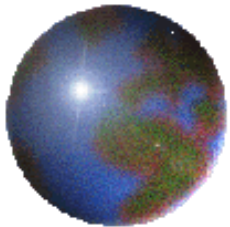


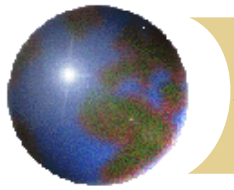


IETF Activities Update



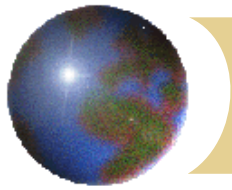
Marla Azinger
marla.azinger@frontiercorp.com

ARIN XXIV
OCT 22, 2009



Note

- ✦ This presentation is not an official IETF report
 - ✦ There is no official IETF Liaison to ARIN or any RIR
- ✦ It is, however, believed to be accurate
- ✦ Errors are the sole responsibility of the authors
- ✦ This presentation is not a detailed review of documents mentioned



Routing Area

✚ *Routing Area Working Group*

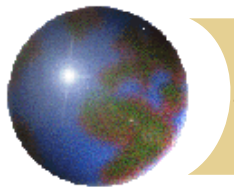
- ✚ Multiple sessions at IETF meetings continue

✚ *Active Documents:*

- ✚ *IP Fast Reroute Using Not-via Addresses* (draft-ietf-rtgwg-ipfrr-notvia-addresses-04)

✚ *IESG Processing*

- ✚ *A Framework for Loop-free Convergence* (draft-ietf-rtgwg-lf-conv-frmwk-06)



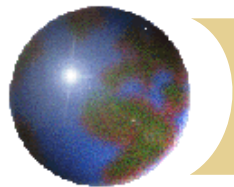
IPv6 Maintenance WG (6man)

✦ *Active documents:*

- ✦ "Solution approaches for address-selection problems" (draft-ietf-6man-addr-select-sol-02.txt)
- ✦ "IANA Allocation Guidelines for the IPv6 Routing Header (draft-ietf-6man-iana-routing-header-00) **NEW**
- ✦ "IPv6 Subnet Model: the Relationship between Links and (Subnet Prefixes draft-ietf-6man-ipv6-subnet-model-05)
- ✦ "IPv6 Node Requirements [RFC 4294](#)-bis (draft-ietf-6man-node-req-bis-03.txt)
- ✦ A Recommendation for IPv6 Address Text Representation (draft-ietf-6man-text-addr-representation-00)

✦ *IESG processing:*

- ✦ ***Handling of overlapping IPv6 fragments (draft-ietf-6man-overlap-fragment-03)***



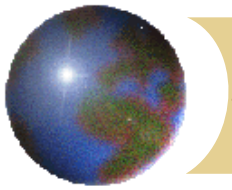
V6 Operations (V6OPS)

✚ *Active Drafts:*

- ✚ **“Recommended Simple Security Capabilities in Customer Premises Equipment for Providing Residential IPv6 Internet Service” (v6ops-cpe-simple-security 07)**
- ✚ **“IPv6 CPE Router Recommendations” (v6ops-ipv6-cpe-router-01)**
- ✚ **Rogue IPv6 Router Advertisement Problem Statement (draft-ietf-v6ops-rogue-ra-00)**
- ✚ **“IPv6 RA-Guard” (v6ops-ra-guard-03)**
- ✚ **IPv6 Deployment in Internet Exchange Points (IXPs) (draft-ietf-v6ops-v6inixp-02.txt)**

✚ *Related drafts but not WG doc's:*

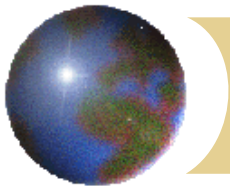
- ✚ **Emerging Service Provider Scenarios for IPv6 Deployment (draft-carpenter-v6ops-isp-scenarios-00)**



SHIM6 WG

✦ *Active document*

- ✦ "Socket Application Program Interface (API) for Multihoming Shim (draft-ietf-shim6-multihome-shim-api-09)



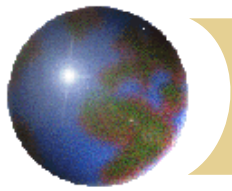
BEHAVE WG

✚ *Active Documents*

- ✚ IPv6 Addressing of IPv4/IPv6 Translators (draft-ietf-behave-address-format-00.txt)
- ✚ DNS64: DNS extensions for Network Address Translation from IPv6 Clients to IPv4 Servers (draft-ietf-behave-dns-64-00)
- ✚ NAT64: Network Address and Protocol Translation from IPv6 Clients to IPv4 Servers (draft-ietf-behave-v6v4-xlate-stateful-02)
- ✚ Traversal Using Relays around NAT (TURN) Extension for IPv6 (draft-ietf-behave-turn-ipv6-07)
- ✚ Traversal Using Relays around NAT (TURN) Extensions for TCP Allocations (turn-tcp-04)
- ✚ Framework for IPv4/IPv6 Translation (draft-ietf-behave-v6v4-framework-01)
- ✚ IP/ICMP Translation Algorithm (draft-ietf-behave-v6v4-xlate-01)

✚ *IESG Processing*

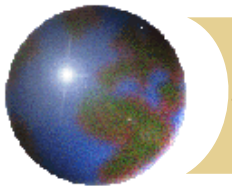
- ✚ "NAT Behavior Discovery Using STUN" (ietf-behave-nat-behavior-discovery)
- ✚ Traversal Using Relays around NAT (TURN): Relay Extensions to Session Traversal Utilities for NAT (STUN) (draft-ietf-behave-turn-16)



Secure Inter-Domain Routing (sidr)

Active documents:

- ❖ "An Infrastructure to Support Secure Internet Routing" (sidr-arch-08)
- ❖ "A Profile for Bogon Origin Attestations"(sidr-bogons-03)
- ❖ Certificate Policy (CP) for the Resource PKI (RPKI) (draft-ietf-sidr-cp-06.txt)
- ❖ A Profile for Resource Certificate Repository Structure (draft-ietf-sidr-repos-struct-03.txt)
- ❖ A Profile for X.509 PKIX Resource Certificates (draft-ietf-sidr-res-certs-17)
- ❖ A Protocol for Provisioning Resource Certificates (draft-ietf-sidr-rescerts-provisioning-05.txt)
- ❖ A Profile for Route Origin Authorizations (ROAs) (draft-ietf-sidr-roa-format-05.txt)
- ❖ Validation of Route Origination in BGP using the Resource Certificate PKI and ROAs (draft-ietf-sidr-roa-validation-03.txt)
- ❖ A Profile for Algorithms and Key Sizes for use in the Resource Public Key Infrastructure draft-ietf-sidr-rpki-algs-00.txt
- ❖ Manifests for the Resource Public Key Infrastructure (draft-ietf-sidr-rpki-manifests-05.txt)
- ❖ Securing RPSL Objects with RPKI Signatures (draft-ietf-sidr-rpsl-sig-01.txt)
- ❖ A Profile for Trust Anchor Material for the Resource Certificate PKI (draft-ietf-sidr-ta-02)



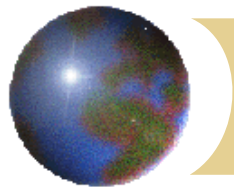
Softwire

✚ *Active Docs:*

- ✚ "Dual-stack lite broadband deployments post IPv4 exhaustion" (softwire-dual-stack-lite)
- ✚ "Load Balancing for Mesh Softwires" (softwire-lb)

✚ *Newly Published*

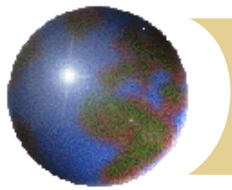
- ✚ " BGP IPSec Tunnel Encapsulation Attribute" (RFC5566)
- ✚ Softwire Hub and Spoke Deployment Framework with Layer Two Tunneling Protocol Version 2 (RFC5571)
- ✚ Softwire Mesh Framework (RFC5565)
- ✚ Softwire Security Analysis and Requirements (RFC5619)



DNS Operations (DNSOP)

Active Documents:

- "AS112 Nameserver Operations" (dnsop-as112-ops-03)
- "I'm Being Attacked by PRISONER.IANA.ORG!" (dnsop-as112-ops-under-attack-03)
- "Requirements for Management of Name Servers for the DNS" (dnsop-name-server-management-reqs-03)



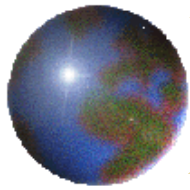
DNS Extensions (DNSEXT)

Active Documents:

- ❖ DNS Transport over TCP (draft-ietf-dnsext-dns-tcp-requirements-00)
- ❖ Cryptographic Algorithm Identifier Allocation for DNSSEC (draft-ietf-dnsext-dnssec-alg-allocation-00)
- ❖ Clarifications and Implementation Notes for DNSSECbis (draft-ietf-dnsext-dnssec-bis-updates-09)
- ❖ Use of GOST signature algorithms in DNSKEY and RRSIG Resource Records for DNSSEC (draft-ietf-dnsext-dnssec-gost-01)
- ❖ DNS Security (DNSSEC) DNSKEY IANA Registry Algorithm Status Addition (draft-ietf-dnsext-dnssec-registry-fixes-00)
- ❖ Extension Mechanisms for DNS (EDNS0) (draft-ietf-dnsext-rfc2671bis-edns0-02)
- ❖ Update to DNAME Redirection in the DNS (draft-ietf-dnsext-rfc2672bis-dname-17)
- ❖ Handling of Unknown DNS Resource Record (RR) Types (draft-ietf-dnsext-rfc3597-bis-00.txt)
- ❖ Deprecation of HMAC-MD5 in DNS TSIG and TKEY Resource Records (draft-ietf-dnsext-tsig-md5-deprecated-03.txt)


RFC Editor's Queue:

- ❖ Use of SHA-2 algorithms with RSA in DNSKEY and RRSIG Resource Records for DNSSEC draft-ietf-dnsext-dnssec-rsasha256-14




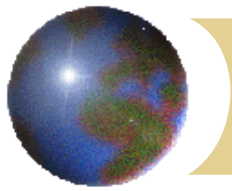
Operational Security Capabilities for IP Networks (OPSEC)

Active Documents

-  "Security Assessment of the Internet Protocol version 4
(draft-ietf-opsec-ip-security-01.txt)

Newly published RFC

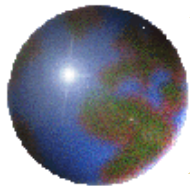
-  Remote Triggered Black Hole Filtering with Unicast
Reverse Path Forwarding (uRPF) (RFC5635)



Global Routing Operations (GROW)

✦ *Active Documents:*

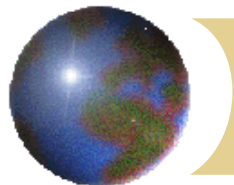
- ✦ Requirements for the graceful shutdown of BGP sessions (draft-ietf-grow-bgp-graceful-shutdown-requirements-00.txt)
- ✦ Graceful BGP session shutdown (draft-ietf-grow-bgp-gshut-00)
- ✦ BGP Monitoring Protocol (draft-ietf-grow-bmp-02)
- ✦ MRT routing information export format (draft-ietf-grow-mrt-10.txt)
- ✦ GRE and IP-in-IP Tunnels for Virtual Aggregation (draft-ietf-grow-va-gre-00.txt)
- ✦ Proposal to use an inner MPLS label to identify the remote ASBR VA (draft-ietf-grow-va-mpls-innerlabel-00.txt)
- ✦ MPLS Tunnels for Virtual Aggregation (draft-ietf-grow-va-mpls-00.txt)
- ✦ Performance of Virtual Aggregation (draft-ietf-grow-va-perf-00.txt)
- ✦ FIB Suppression with Virtual Aggregation (draft-ietf-grow-va-00.txt)



Locator/Identifier Separation (LISP)

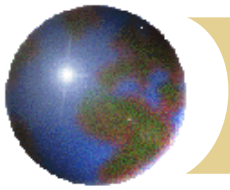
Active Documents:

- ❏ LISP Alternative Topology (LISP+ALT) (draft-ietf-lisp-alt-01.txt)
- ❏ Interworking LISP with IPv4 and IPv6 (draft-ietf-lisp-interworking-00)
- ❏ LISP Map Server (draft-ietf-lisp-ms-04.txt)
- ❏ LISP for Multicast Environments (draft-ietf-lisp-multicast-02.txt)
- ❏ Locator/ID Separation Protocol (LISP) (draft-ietf-lisp-05.txt)



Hiroshima IETF

- ✚ Next IETF: Nov 8-13, Hiroshima, Japan
- ✚ IETF BOF WIKI summarizes recent and upcoming BOF activities:
 - ✚ <http://tools.ietf.org/bof/trac/wiki>
 - ✚ Includes (early) topics that might (or might not) eventually result in official BOFs
- ✚ Officially approved BOFs (once known):
 - ✚ Performance Metrics for Other Layers BOF
 - ✚ <https://datatracker.ietf.org/meeting/76/agenda.html>



References

✦ General WG info:

- ✦ <http://tools.ietf.org/wg>

- ✦ <http://tools.ietf.org/wg/foo> (for WG “foo”)?

✦ Internet Drafts:

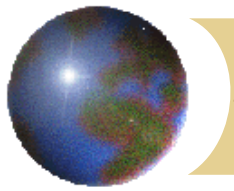
- ✦ <http://tools.ietf.org/html>

✦ Upcoming meeting agenda:

- ✦ <http://tools.ietf.org/agenda>

✦ Upcoming BOFs Wiki:

- ✦ <http://tools.ietf.org/bof/trac/wiki>



Thank you

Questions?