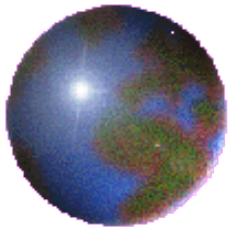




# *IETF Activities Update*



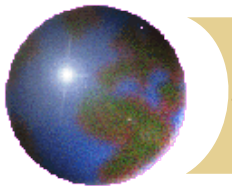
Marla Azinger

[marla.azinger@frontiercorp.com](mailto:marla.azinger@frontiercorp.com)

ARIN XXVI

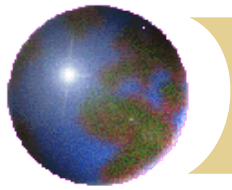
OCT 2010

Atlanta, GA



## *Note*

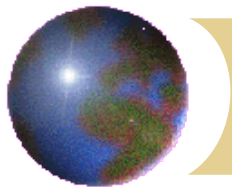
- ✦ This presentation is not an official IETF report
  - ✦ There is no official IETF Liaison to ARIN or any RIR
- ✦ It is, however, believed to be accurate
- ✦ Errors are the sole responsibility of the author
- ✦ This presentation is not a detailed review of documents mentioned



# Routing Area WG

## ✚ *Active Documents:*

- ✚ *Requirements for MPLS Over a Composite Link [draft-ietf-rtgwg-cl-requirement-01](#)*
- ✚ *LFA applicability in SP networks([draft-ietf-rtgwg-lfa-applicability-00](#) )*



# IPv6 Maintenance WG (6man)

## ✚ *Active documents:*

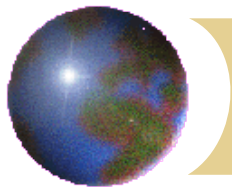
- ✚ A uniform format for IPv6 extension headers ([draft-ietf-6man-exthdr-00](#))
- ✚ Things To Be Included in RFC 3484 Revision ([draft-ietf-6man-rfc3484-revise-00](#))
- ✚ RPL Option for Carrying RPL Information in Data-Plane Datagrams([draft-ietf-6man-rpl-option-00](#) )
- ✚ An IPv6 Routing Header for Source Routes with RPL ([draft-ietf-6man-rpl-routing-header-00](#) )
- ✚ IPv6 UDP Checksum Considerations ([draft-ietf-6man-udpzero-01](#) )
- ✚ IPv6 Node Requirements RFC 4294-bis (draft-ietf-6man-node-req-bis-05.txt)

## ✚ *RFC Editor Queue:*

- ✚ IPv6 Router Advertisement Options for DNS Configuration RFC 5006-(bis draft-ietf-6man-dns-options-bis-08)

## ✚ *Newly published:*

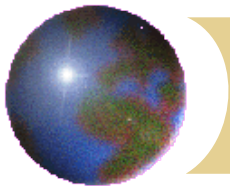
- ✚ RFC 5952 A Recommendation for IPv6 Address Text Representation ([draft-ietf-6man-text-addr-representation](#))



# V6 Operations (V6OPS)

## ☉ Active Drafts:

- ❖ IPv6 Address Assignment to End Sites ([draft-ietf-v6ops-3177bis-end-sites-00](#) )
- ❖ Recommended Simple Security Capabilities in Customer Premises Equipment for Providing Residential IPv6 Internet Service (draft-ietf-v6ops-cpe-simple-security-14)
- ❖ An Incremental Carrier-Grade NAT (CGN) for IPv6 Transition (draft-ietf-v6ops-incremental-cgn-01.txt)
- ❖ IPv6 Router Advertisement Guard ([draft-ietf-v6ops-ra-guard-08](#) )
- ❖ Routing Loop Attack using IPv6 Automatic Tunnels: Problem Statement and Proposed Mitigations([draft-ietf-v6ops-tunnel-loops-00](#) )
- ❖ Security Concerns With IP Tunneling (draft-ietf-v6ops-tunnel-security-concerns-02)
- ❖ Mobile Networks Considerations for IPv6 Deployment([draft-ietf-v6ops-v6-in-mobile-networks-01](#) )



# V6OPS *Continued*

## ✚ *RFC Editor Queue*

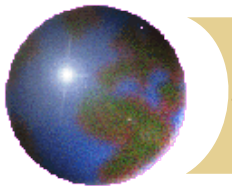
- ✚ Basic Requirements for IPv6 Customer Edge Routers ([draft-ietf-v6ops-ipv6-cpe-router-07](#))
- ✚ Emerging Service Provider Scenarios for IPv6 Deployment ([draft-ietf-v6ops-isp-scenarios-00](#))

## ✚ *IESG Review*

- ✚ Rogue IPv6 Router Advertisement Problem Statement ([draft-ietf-v6ops-rogue-ra-01](#))

## ✚ *Newly Published:*

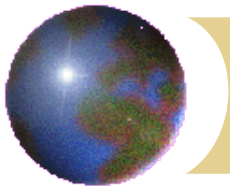
- ✚ RFC 5963 IPv6 Deployment in Internet Exchange Points (IXPs) ([draft-ietf-v6ops-v6inixp](#))



# SHIM6 WG

## ✚ *Active document*

- ✚ Applicability Statement for the Level 3 Multihoming Shim Protocol (Shim6) (draft-ietf-shim6-applicability-07)
- ✚ Socket Application Program Interface (API) for Multihoming Shim (draft-ietf-shim6-multihome-shim-api-14)



# BEHAVE WG

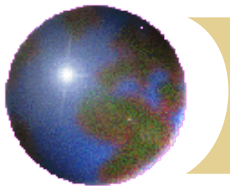
## ✦ *Active Documents*

- ✦ Stream Control Transmission Protocol (SCTP) Network Address Translation (draft-ietf-behave-sctpnat-03.txt)
- ✦ IP/ICMP Translation Algorithm (draft-ietf-behave-v6v4-xlate-23)  
– AD Evaluation
- ✦ An FTP ALG for IPv6-to-IPv4 translation ([draft-ietf-behave-ftp64-05](#) )

## ✦ *IESG Processing*

- ✦ DNS64: DNS extensions for Network Address Translation from IPv6 Clients to IPv4 Servers (draft-ietf-behave-dns64-09) - AD Evaluation





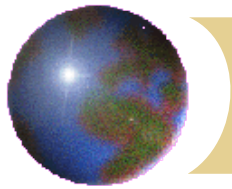
# *BEHAVE WG* continued

## *RFC Editor Queue*

- ❖ IPv6 Addressing of IPv4/IPv6 Translators (draft-ietf-behave-address-format-10.txt)
- ❖ Traversal Using Relays around NAT (TURN) Extension for IPv6 (draft-ietf-behave-turn-ipv6-11)
- ❖ Traversal Using Relays around NAT (TURN) Extensions for TCP Allocations (draft-ietf-behave-turn-tcp-07.txt)
- ❖ Framework for IPv4/IPv6 Translation (draft-ietf-behave-v6v4-framework-10)
- ❖ Stateful NAT64: Network Address and Protocol Translation from IPv6 Clients to IPv4 Servers (draft-ietf-behave-v6v4-xlate-stateful-12)

## *Newly Published*

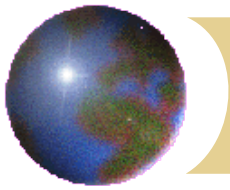
- ❖ RFC 5766 Traversal Using Relays around NAT (TURN): Relay Extensions to Session Traversal Utilities for NAT (STUN)
- ❖ RFC 5780 NAT Behavior Discovery Using Session Traversal Utilities for NAT (STUN)
- ❖ RFC 5769 Test Vectors for Session Traversal Utilities for NAT (STUN)
- ❖ RFC 5928 Traversal Using Relays around NAT (TURN) Resolution Mechanism



# *Secure Inter-Domain Routing (sidr)*

## ✦ *Active documents:*

- ✦ **An Infrastructure to Support Secure Internet Routing (sidr-arch-11)**
- ✦ Certificate Policy (CP) for the Resource PKI (RPKI) ([draft-ietf-sidr-cp-13.txt](#))
- ✦ A Profile for Route Origin Authorizations (ROAs) ([draft-ietf-sidr-roa-format-07.txt](#))
- ✦ Signed Object Template for the Resource Public Key Infrastructure ([draft-ietf-sidr-signed-object-01.txt](#) )
- ✦ CA Key Rollover in the RPKI ([draft-ietf-sidr-keyroll-01](#) )
- ✦ BGP Prefix Origin Validation ([draft-ietf-sidr-pfx-validate-00](#) )
- ✦ A Profile for Resource Certificate Repository Structure ([draft-ietf-sidr-repos-struct-04](#) )
- ✦ A Profile for X.509 PKIX Resource Certificates ([draft-ietf-sidr-res-certs-18](#))
- ✦ A Protocol for Provisioning Resource Certificates ([draft-ietf-sidr-rescerts-provisioning-06](#))
- ✦ A Profile for Algorithms and Key Sizes for use in the Resource Public Key Infrastructure([draft-ietf-sidr-rpki-algs-01](#) )
- ✦ The RPKI/Router Protocol ([draft-ietf-sidr-rpki-rtr-02](#) )
- ✦ A Profile for Trust Anchor Material for the Resource Certificate PKI([draft-ietf-sidr-ta-04](#) )
- ✦ Use Cases and interpretation of RPKI objects for issuers and relying parties ([draft-ietf-sidr-usecases-00](#) )
- ✦ Validation of Route Origination using the Resource Certificate PKI and ROAs ([draft-ietf-sidr-roa-validation-06.txt](#))
- ✦ Manifests for the Resource Public Key Infrastructure ([draft-ietf-sidr-rpki-manifests-07.txt](#))
- ✦ Securing RPSL Objects with RPKI Signatures ([draft-ietf-sidr-rpsl-sig-03.txt](#))



# Softwire

## ✚ *Active Docs:*

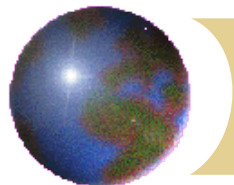
- ✚ Gateway Initiated Dual-Stack Lite Deployment ([draft-ietf-softwire-gateway-init-ds-lite-00](#) )
- ✚ Dual-Stack Lite Broadband Deployments Following IPv4 Exhaustion (draft-ietf-softwire-dual-stack-lite-06)

## ✚ *IESG Processing*

- ✚ Dynamic Host Configuration Protocol for IPv6 (DHCPv6) Option for Dual- Stack Lite ([draft-ietf-softwire-ds-lite-tunnel-option-05](#) )

## ✚ *Newly Published*

- ✚ RFC 5969 IPv6 Rapid Deployment on IPv4 Infrastructures (6rd) -- Protocol Specification



# *DNS Operations (DNSOP)*

## *Active Documents:*

- ❖ Locally-served DNS Zones (draft-ietf-dnsop-default-local-zones-14)
- ❖ DNSSEC Signing Policy & Practice Statement Framework (draft-ietf-dnsop-dnssec-dps-framework-02)
- ❖ DNSSEC Trust Anchor History Service (draft-ietf-dnsop-dnssec-trust-history-02)
- ❖ DNSSEC Operational Practices, Version 2 (draft-ietf-dnsop-rfc4641bis-04 )
- ❖ I'm Being Attacked by PRISONER.IANA.ORG! ([draft-ietf-dnsop-as112-under-attack-help-help-04](#) )
- ❖ AS112 Nameserver Operations ([draft-ietf-dnsop-as112-ops-04](#) )
- ❖ DNSSEC Key Timing Considerations ([draft-ietf-dnsop-dnssec-key-timing-00](#) )
- ❖ Requirements for Management of Name Servers for the DNS ([draft-ietf-dnsop-name-server-management-reqs-04](#) )



# *Operational Security Capabilities for IP Networks (OPSEC)*

## *Active Documents*

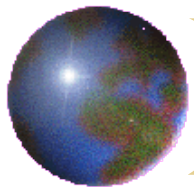
- ❖ Security Best Practices Efforts and Documents (draft-ietf-opsec-efforts-12.txt)
- ❖ Protecting The Router Control Plane ([draft-ietf-opsec-protect-control-plane-03](#) )
- ❖ Security Assessment of the Internet Protocol version 4 (draft-ietf-opsec-ip-security-03.txt)

## *IESG Review*

- ❖ Cryptographic Authentication Algorithm Implementation Requirements for Routing Protocols ([draft-ietf-opsec-igp-crypto-requirements-02](#) )

## *RFC Editor Queue*

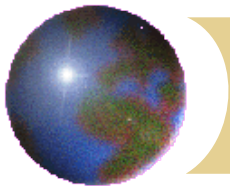
- ❖ Issues with existing Cryptographic Protection Methods for Routing Protocols (draft-ietf-opsec-routing-protocols-crypto-issues-07.txt)



# *Global Routing Operations (GROW)*

## *Active Documents:*

- ❖ Requirements for the graceful shutdown of BGP sessions (draft-ietf-grow-bgp-graceful-shutdown-requirements-04.txt )
- ❖ BGP Monitoring Protocol (draft-ietf-grow-bmp-04 )
- ❖ MRT routing information export format (draft-ietf-grow-mrt-11.txt)
- ❖ Distribution of diverse BGP paths([draft-ietf-grow-diverse-bgp-path-dist-02](#) )
- ❖ MRT BGP routing information export format with geo-location extensions([draft-ietf-grow-geomrt-00](#) )
- ❖ Simple Virtual Aggregation (S-VA) (draft-ietf-grow-simple-va-01.txt )
- ❖ FIB Suppression with Virtual Aggregation (draft-ietf-grow-va-03.txt )
- ❖ Auto-Configuration in Virtual Aggregation (draft-ietf-grow-va-auto-02.txt )



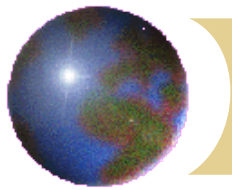
# OPSWAG

## ✦ *Active Documents:*

- ✦ Guidelines for the use of the OAM acronym in the IETF ([draft-ietf-opsawg-mpls-tp-oam-def-07](#) )
- ✦ An Overview of Operations, Administration, and Maintenance (OAM) Mechanisms ([draft-ietf-opsawg-oam-overview-01](#))

## ✦ *Interesting Activity:*

- ✦ Additional Private IPv4 Space Issues (draft-azinger-additional-private-ipv4-space-issues-04) – Last call IESG
- ✦ IANA Reserved IPv4 Prefix for IPv6 Transition draft-weil-opsawg-provider-address-space-02



# *Beijing, China IETF 79*

## ✚ Next IETF:

✚ Beijing, China  
Nov 7-12, 2010

## ✚ IETF BOF WIKI summarizes recent and upcoming BOF activities:

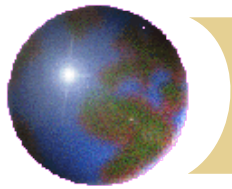
✚ <http://tools.ietf.org/bof/trac/wiki>

✚ Includes (early) topics that might (or might not) eventually result in official BOFs

## ✚ Officially approved BOFs (once known):

✚ Performance Metrics for Other Layers BOF





# References

## ⊕ General WG info:

- ⊞ <http://tools.ietf.org/wg>
- ⊞ <http://tools.ietf.org/wg/foo> (for WG "foo")?
- ⊞ <http://datatracker.ietf.org/wg/> (**Easiest to use**)

## ⊕ Internet Drafts:

- ⊞ <http://tools.ietf.org/html>

## ⊕ IETF Daily Dose (**quick tool to get an update**):

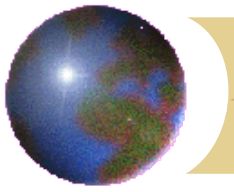
- ⊞ <http://tools.ietf.org/dailydose/>

## ⊕ Upcoming meeting agenda:

- ⊞ <http://tools.ietf.org/agenda>

## ⊕ Upcoming BOFs Wiki:

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



Thank you

*Questions?*