

# IETF Activities Update

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# 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

# Routing & Addressing

- Amsterdam workshop (Oct. 2006)
  - Scalability of routing system at issue
  - draft-iab-raws-report-02.txt
  - Plenary report at San Diego IETF
- December message to ietf-announce from IAB & IETF Chair:
  - Problem is real, even if timescale & details are debatable
  - Creation of a directorate to follow activities
  - Discuss on [ram@iab.org](mailto:ram@iab.org) list
- On and off-list discussion before Prague IETF

# Prague IETF

- Plenary presentation on overall activities
- Full day Routing Research Group (RRG) workshop
  - Including next steps and charter
- Internet Area
  - BOF-style discussion on identifier-locator separation issues and future directions
  - Clear interest in doing work, but scope uncertain
- Routing Area
  - BGP table growth and routing dynamics
  - BGP extensions/practices that might help

# Next Steps

- Completion of problem statement (or statements)
- Clarify work plan for addressing problem
  - Some will be done in RRG (e.g., longer-term ID/Locator research work)
  - Some may be done in IETF WG (e.g., shorter-term ID/locator engineering work)
  - Some will be done in existing Routing Area WGs (e.g., IDR)
- Please participate as appropriate
  - Progress only made through active participation

# Routing & Addressing References

- December Message from IAB & IETF Chairs
  - <http://www1.ietf.org/mail-archive/web/ietf-announce/current/msg03255.html>
- Workshop report:
  - <http://tools.ietf.org/html/draft-iab-raws-report-02>
- RAM mailing list:
  - <https://www1.ietf.org/mailman/listinfo/ram>
- Routing Research Group:
  - <http://irtf.org/charter?gtype=rg&group=rrg>

# Global Routing Operations (GROW)

- <http://tools.ietf.org/wg/grow>
- Status: Looking to recharter or shutdown
  - Did not meet in Prague
  - Needs energy (i.e., real contributors) to continue
  - Status being discussed on mailing list
- 1 Active Document:
  - "MRT routing information export format" (ietf-grow-mrt)

# SHIM6 WG

- <http://tools.ietf.org/wg/shim6>
- Still finalizing last details on 3 Core docs
  - “Hash Based Addresses (HBA)” (shim6-hba)
  - “Level 3 Multihoming Shim Protocol” (shim6-proto)
  - “Failure Detection and Locator Pair Exploration Protocol For IPv6 Multihoming” (shim6-failure-detection)
- Then to IETF LC and IESG for consideration & approval
- Note: “A” multihoming approach, not “The” approach



# IPv6 WG

- <http://tools.ietf.org/wg/ipv6/>
- Maintenance/wrap up mode (no meetings)
- No face-to-face meeting in almost a year
- 1 remaining (revised RFC) document:
  - “IPv6 over PPP” (ipv6-over-ppp-v2)
- Now in RFC Editor Queue :
  - “Neighbor Discovery for Ipv6” (RFC2461bis)
  - “Stateless Autoconfiguration (RFC2462bis)
  - “Privacy Extensions for Stateless Address Autoconfiguration for IPv6” (RFC3041bis)

# IPv6 WG (cont.)

- “IPv6 Address Allocation to End Sites”  
(narten-ipv6-3177bis-48boundary)
  - Not a WG document
  - No movement (authors have token to followup)
- “Centrally Assigned Unique Local Addresses”
  - Expired WG document
  - Previously put on hold by the WG
  - Would also address problem on policy proposal 2006-2 (which ARIN adopted last year)
  - No movement (support continues to be unclear)

# V6 Operations (V6OPS)

- <http://tools.ietf.org/wg/v6ops/>
- 8 Active WG documents, including:
  - “IPv6 Routing Policies Guidelines” (v6ops-routing-guidelines)
  - “IPv6 Unicast Address Assignment Considerations” (v6ops-addcon)
  - “IPv6 Campus Transition Scenario Description and Analysis” (v6ops-campus-transition)
  - “Special-Use IPv6 Addresses” (v6ops-rfc3330-for-ipv6)

# V6OPS (cont.)

- 7 Documents in RFC Editor Queue, including:
  - “IPv6 Enterprise Network Analysis” (v6ops-ent-analysis)
  - “ISP IPv6 Deployment Scenarios in Broadband Access Networks” (v6ops-bb-deployment-scenarios)
  - “Recommendations for Filtering ICMPv6 Messages in Firewalls” (v6ops-icmpv6-filtering-bcp)
  - “IPv6 Network Architecture Protection” (v6ops-nap)
  - “Reasons to Move NAT-PT to Historic” (v6ops-natpt-to-exprmntl )

# Softwire WG

- <http://tools.ietf.org/wg/softwires>
- Active Docs:
  - “Softwire Mesh Framework” (softwire-mesh-framework)
  - “Softwires Hub & Spoke Deployment Framework with L2TPv2” (softwire-hs-framework-l2tpv2)
  - “Softwire Security Analysis and Requirements” (softwire-security-requirements)
- In RFC Editor Queue:
  - “Softwire Problem Statement” (softwire-problem-statement)

# DNS Operations (DNSOP)

- <http://tools.ietf.org/wg/dnsop/>
- 6 Active Documents:
  - “AS112 Nameserver Operations” (dnsop-as112-ops)
  - “I'm Being Attacked by PRISONER.IANA.ORG!” (dnsop-as112-ops-under-attack)
  - “Locally Served Zones” (dnsop-default-local-zones)
  - “Preventing Use of Recursive Nameservers in Reflector Attacks” (dnsop-reflectors-are-evil)
  - “DNS Referral Response Size Issues” (dnsop-respsize)
  - “Considerations for the use of DNS Reverse Mapping” (dnsop-reverse-mapping-considerations)

# DNSOP (cont.)

- Active Documents (cont.)
  - “DNS Referral Response Size Issues” (dnsop-respsize)
  - “Considerations for the use of DNS Reverse Mapping” (dnsop-reverse-mapping-considerations)
- 1 Document in RFC Editor Queue:
  - “Requirements for a Mechanism Identifying a Name Server Instance” (dnsop-serverid)

# DNS Extensions (DNSEXT)

- <http://tools.ietf.org/wg/dnsex>
- Mostly done with DNSSEC, discussing what WG should do next (shutdown? Maintenance mode?)
- Active Documents:
  - "Clarifications and Implementation Notes for DNSSECbis" (dnssec-bis-updates)
  - "Elliptic Curve Keys and Signatures in the Domain Name System (DNS)" (dnsex-ecc-key)
  - "DSA Keying and Signature Information in the DNS" (dnsex-rfc2536bis-dsa)
  - "Storage of Diffie-Hellman Keying Information in the DNS" (dnsex-rfc2539bis-dhk)
  - "Update to DNAME Redirection in the DNS" (dnsex-rfc2672bis-dname)



# DNSEXT (cont.)

- IESG Review:
  - "Domain Name System (DNS) IANA Considerations" (dnsext-2929bis)
  - "DNSSEC Hashed Authenticated Denial of Existence" (dnsext-nsec3)
  - "DNS Name Server Identifier Option (NSID)" (dnsext-nsid)
  - "Requirements related to DNSSEC Trust Anchor Rollover" (dnsext-rollover-requirements)
  - "Automated Updates of DNSSEC Trust Anchors" (dnsext-trustupdate-timers)
- RFC Editor Queue:
  - "DNSSEC Experiments" (dnsext-dnssec-experiments)

# Operational Security Capabilities for IP Networks (OPSEC)

- <http://tools.ietf.org/wg/opsec>
- IESG Processing:
  - “Operational Security Current Practices” (opsec-current-practices)
- Active Documents
  - “Service Provider Infrastructure Security” (opsec-infrastructure-security)
  - “Framework for Operational Security Capabilities for IP Network Infrastructure” (opsec-framework)
  - “Filtering and Rate Limiting Capabilities For IP Network Infrastructure” (opsec-filter-caps)

# BOFs

- Next IETF: July 22-27, Chicago, IL
- IETF BOF WIKI summarizes recent and upcoming BOF activities:
  - <http://www1.tools.ietf.org/bof/trac/wiki>
  - Includes (early) topics that might (or might not) eventually result in official BOFs
- Officially approved BOFs (once known):
  - <http://tools.ietf.org/agenda/69>

Questions?