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

- Problem Statement
  - draft-narten-radir-problem-statement-01.txt
- Solution efforts focussed in Routing Research Group (RRG)
  - Charter and pointers:
    - http://www.irtf.org/charter?gtype=rg&group=rrg
  - 9 proposals at present; each progressing at own pace
  - Will meet at Vancouver IETF in December
- RFCs Published:
  - “Report from the IAB Workshop on Routing and Addressing” (RFC 4984)

SHIM6 WG

- Mostly in wrap up mode
- 3 Core docs in various stages of IESG processing
  - “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)
- Active Docs
  - "Applicability Statement for the Level 3 Multihoming Shim Protocol" (shim6-applicability)
  - "Default Locator-pair selection algorithm for the SHIM6 protocol" (locator-pair-selection)
  - "Socket Application Program Interface (API) for Multihoming Shim" (multihome-shim-api)

IPv6 Maintenance WG (6man)

- IPv6 WG closed; 6man WG created
- 6man Focus: maintenance/revision of existing specs
  - Not chartered to start substantive new work
  - New IPv6 work (where needed) will be done elsewhere
- Active Documents:
  - "Negotiation for IPv6 Datagram Compression using IPv6 Control Protocol" (ipv6-compression-nego-v2)
  - "Centrally Assigned Unique Local IPv6 Unicast Addresses" (ipv6-ula-central) (no concensus)
  - "Deprecation of Type 0 Routing Headers in IPv6" (ipv6-deprecate-rh0)
  - "IPv6 Router Advertisement Flags Option" (ipv6-ra-flags-option)

6man (cont.)

- Recent RFCs:
  - "Neighbor Discovery for IP version 6 (IPv6)" (RFC 4861)
  - "IP Version 6 over PPP" (RFC 5072)
  - "Privacy Extensions for Stateless Address Autoconfiguration in IPv6" (RFC 4941)
  - "IPv6 Stateless Address Autoconfiguration" (RFC 4862)

V6 Operations (V6OPS)

- Active documents
  - "IPv6 Unicast Address Assignment Considerations" (v6ops-addcon)
  - "Requirements for address selection mechanisms" (v6ops-addr-select-req)
  - "Recommended Simple Security Capabilities in Customer Premises Equipment for Providing Residential IPv6 Internet Service" (v6ops-cpe-simple-security)
  - "Special-Use IPv6 Addresses" (v6ops-rfc3330-for-ipv6)
  - "Teredo Security Concerns" (v6ops-teredo-security-concerns)
  - "Problem Statement of Default Address Selection in Multi-prefix" Environment: Operational Issues of RFC3484 Default Rules" (v6ops-addr-select-ps)
  - "IPv6 Campus Transition Scenario Description and Analysis" (v6ops-campus-transition)
  - "IPv6 Routing Policies Guidelines" (v6ops-routing-guidelines)

V6ops (cont.)

- IESG processing:
  - "IPv6 Deployment Scenarios in 802.16 Networks" (v6ops-802-16-deployment-scenarios)
  - "IPv6 Implications for Network Scanning" (v6ops-scanning-implications)
- RFCs published:
  - "IPv6 Enterprise Network Analysis - IP Layer 3 Focus" (RFC 4852)
  - "Recommendations for Filtering ICMPv6 Messages in Firewalls" (RFC 4890)
  - "Using IPsec to Secure IPv6-in-IPv4 Tunnels" (RFC 4891)
  - "Local Network Protection for IPv6" (RFC 4864)
  - "Reasons to Move the Network Address Translator – Protocol
  - Translator (NAT-PT) to Historic Status" (RFC 4966)
  - "IPv6 Neighbor Discovery On-Link Assumption Considered Harmful" (RFC 4943)
  - "IPv6 Transition/Coexistence Security Considerations" (RFC 4942)

Softwire WG

- 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)
- RFC Published:
  - “Softwire Problem Statement” (RFC 4925)

DNS Operations (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)
  - “DNS Referral Response Size Issues” (dnsop-respsize)
  - “Considerations for the use of DNS Reverse Mapping” (dnsop-reverse-mapping-considerations)
- IESG Processing:
  - “Preventing Use of Recursive Nameservers in Reflector Attacks” (dnsop-reflectors-are-evil)
- Recent RFCs:
  - “Requirements for a Mechanism Identifying a Name Server Instance” (RFC 4982)

DNS Extensions (DNSEXT)

- Mostly done with DNSSEC, will shift to maintenance mode
- Active Documents:
  - "Clarifications and Implementation Notes for DNSSECbis" (dnssec-bis-updates)
  - "Elliptic Curve Keys and Signatures in the Domain Name System (DNS)" (dnsext-ecc-key)
  - "DSA Keying and Signature Information in the DNS" (dnsext-rfc2536bis-dsa)
  - "Storage of Diffie-Hellman Keying Information in the DNS" (dnsext-rfc2539bis-dhk)
  - "Update to DNAME Redirection in the DNS" (dnsext-rfc2672bis-dname)
  - "Evaluating DNSSEC Transition Mechanisms" (dnsext-dnssec-trans)
  - "Measures for Making DNS More Resilient Against Forged Answers" (dnsext-forgery-resilience)

DNSEXT (cont.)

- IESG Review:
  - "Domain Name System (DNS) IANA Considerations" (dnsext-2929bis)
  - "DNSSEC Hashed Authenticated Denial of Existence" (dnsext-nsec3)
- Recent RFCs:
  - "DNS Security (DNSSEC) Experiments" (RFC 4955)
  - "DNS Security (DNSSEC) Opt-In" (RFC 4956)
  - "DNS Name Server Identifier (NSID) Option" (RFC 5001)
  - "Requirements Related to DNS Security (DNSSEC) Trust Anchor Rollover" (RFC 4986)
  - "Automated Updates of DNS Security (DNSSEC) Trust Anchors" (RFC 5011)

Operational Security Capabilities for IP Networks (OPSEC)

- IESG Processing:
  - “Filtering and Rate Limiting Capabilities For IP Network Infrastructure” (opsec-filter-caps)
  - “Routing Control Plane Security Capabilities” (opsec-routing-capabilities)
- Active Documents
  - “Security Best Practices Efforts and Documents” (draft-ietf-opsec-efforts)
  - “Logging Capabilities for IP Network Infrastructure” (opsec-logging-caps)
  - “Service Provider Infrastructure Security” (opsec-infrastructure-security)
  - “Framework for Operational Security Capabilities for IP Network Infrastructure” (opsec-framework)
- Published
  - “Operational Security Current Practices” (RFC 4778)

Secure Inter-Domain Routing (sidr)

- Active Documents:
  - "An Infrastructure to Support Secure Internet Routing" (sidr-arch)
  - "Certificate Policy (CP) for the Internet IP Address and AS Number (PKI)" (ietf-sidr-cp)
  - "Template for an Internet Registry's Certification Practice Statement (CPS) for the Internet IP Address and AS Number (PKI)" (sidr-cps-irs)
  - "Template for an Internet Service Provider's Certification Practice Statement (CPS) for the Internet IP address and AS Number PKI" (sidr-cps-isp)
  - "A Profile for X.509 PKIX Resource Certificates" (sidr-res-certs)
  - "A Profile for Route Origin Authorizations (ROAs)" (sidr-roa-format)

Global Routing Operations (GROW)

- Status:
  - Was looking to recharter or shutdown (March)
  - New Chairs (June)
  - Not much traffic on list, no new charter (yet)
  - Needs energy?
- All 3 WG documents have expired

Vancouver IETF

- Next IETF: Dec. 2-7, Vancouver, BC
- 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):
  - http://tools.ietf.org/agenda/70
- Confirmed BOFs (so far):
  - Performance Metrics for Other Layers BOF

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

Questions?