

Routing activities within the IETF and the IAB

kurtis@netnod.se
Internetdagarna 2006

Short about the IETF

- Routing Area
 - Lead by two Area Directors, currently Ross Callon and David Ward
 - Split into several working groups
 - Inter Domain Routing, IDR
 - IS-IS for IP internets, ISIS
 - Open Shortest Path First IGP, OSPF
 - RPSEC
 - RTGWG

Short about the IETF

Other routing area working groups

[bfd](#), Bidirectional Forwarding Detection

[ccamp](#), Common Control and Measurement Plane

[forces](#), Forwarding and Control Element Separation

[l1vpn](#), Layer 1 Virtual Private Networks

[manet](#), Mobile Ad-hoc Networks

[mpls](#), Multiprotocol Label Switching

[pce](#), Path Computation Element

[pim](#), Protocol Independent Multicast

[sidr](#), Secure Inter-Domain Routing

[vrrp](#), Virtual Router Redundancy Protocol

IDR

- Tasked with the “maintenance” and development of BGPv4
- Current development is
 - Outbound route filtering, prefix and AS
 - IPv6 NETXT_HOP for IPv4 NLRI
 - Flow specification rules
 - BGP encapsulation and BGP tunnel Encapsulation attribute

ISIS

- Maintenance and updates of IP related TLVs
- Current development
 - IPV6 and ISIS
 - IPv6 TE in ISIS
 - Point-to-point operation over LAN in link-state routing protocols
 - Policy control mechanism in ISIS using administrative tags
 - Simplified LSP space for ISIS
 - Dynamic hostname exchange

OSPF

- Maintenance and development of OSPF
- Current activities
 - OSPFv3 MIB
 - OSPF link-local signaling
 - TE extensions for OSPFv3
 - OSPF multi area adjacency
 - OPSVv3 graceful restart
 - Multi-topology routing in OSPFv3
 - The OSPF opaque LSA option
 - OSPFv2 MIB for multi topology routing

RPSEC

- Tasked with analysis of the security of routing protocols
- Currently activities
 - BGP security requirements

RTGWG

- General routing issues
- Current activities
 - GTSM
 - IP Fast Reroute
 - Loop-free convergence

IRTF RRG

- Internet Research Task Force runs a Routing Research Group
- Discussions
 - LISP
 - LOC/ID splits
 - Application of HIP

IAB

- The IAB held a workshop in Amsterdam in October 2006
- This lead to discussions that where 'moderated' by the IAB on the arch-discuss and RAWWS lists
- These discussions are now anticipated to have moved to the RRG list...
- "The IAB continues to monitor developments..."

Future work

- Technologies and proposal that will result from the RRG will be handled the normal IETF way
- LISP BOF in Vancouver
- Currently it is up to the market to decide what standard to use...