

# Routing activities within the IETF and the IAB

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# 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-topolgy 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 were ‘moderated’ by the IAB on the arch-discuss and RAWS 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...