

Routing Protocol Standardization Criteria

How it affects the Internet Area

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A Note About Running Code

1. At the end of the day, without Running Code we are all wasting our time here.
2. The discussion today is *not* about implementation experience being good or bad, it is about where in our standardization process to freeze a document and publish it as an RFC

RFC1264

Internet Routing Protocol Standardization Criteria

- Informational RFC published in 1991
- Authored by then RTG AD, Bob Hinden
- Reflects the thinking at the time of the IAB and IESG
- Predates RFC2026, referring to a time when the IAB approved documents, not the IESG
- Refers specifically to IGP and EGP (Interior and Exterior Gateway Protocols)
- Outlines additional procedures to standardize Routing Protocols

RFC1264 - Motivation

- Routing protocols are:
 - Complex, widely distributed, real-time algorithms
 - Difficult to implement and test
 - Are key elements in the successful operation of the Internet
- Thus, they should be subject to more stringent publishing criteria

RFC1264 - Current Impact

- RFC1264bis:
 - `draft-fenner-zinin-rtg-standard-reqts-01.txt`
- Additional req's at Proposed Standard
 - MIB ID must exist
 - Major features tested
 - 2 interoperable implementations must exist
- Much Like Draft Standard
- This impact has evolved over time, application not entirely consistent
- Scope - Beyond IGP and EGP (i.e., also includes LDP and RSVP-TE)
- Currently affecting a number of documents in the IESG queue from the L2VPN and L3VPN WGs.
- “Escape mechanism” procedures defined - Experimental track, IETF Last Call for Variance

Process Summary

	PS	DS	S
Change Summary	No	Yes	Yes
MIB Requirement	I-D	PS	S
Implementations	≥ 2	≥ 2	≥ 3
Feature Test	Major	All-2imp	All-2ind
Operational Experience	None	Significant	Multi-Vendor
Protocol Analysis	No	Yes	Yes

Obvious Questions for the Int-Area

- **Why does this affect me? I thought this was just a RTG-Area thing?**
 - Criteria targets the protocol not the area
 - RFC1264 is not “binding” IETF consensus, but RFC 2026 does allow demanding additional criteria
 - RFC1264bis, If/when published as a BCP, would be official binding IETF process

- **Will this slow down my draft getting to RFC?**
 - Probably, at least for PS.
- **What about IPv6?**
 - IPv6 extensions w/o 2 implementations will advance on Experimental, or a variance requested via IETF Last Call
 - Recent example: draft-ietf-l2vpn-signalling held two discusses, one requesting specification of IPv6, and another that an implementation report is necessary to advance to PS.

- **Will our documents improve?**
 - Yes and No.
 - Implementation experience is always good.
 - Procedural hurdles can have adverse affects
- **What about newtrk?**
 - Newtrk can only affect some day in the future, we have to decide what we are doing today.
 - A significant change in standards track procedures resulting from the newtrk effort could render RFC1264bis obsolete.

- **What about my document? Do I need to writeup an implementation report?**
 - If your document touches a routing protocol, be prepared for the IESG to ask for an implementation report at PS
 - Blocked L2VPN and L3VPN documents in IESG queue
 - draft-ietf-l2vpn-signaling
 - draft-ietf-l2vpn-vpls-bgp
 - draft-ietf-l2vpn-vpls-ldp
 - draft-ietf-l3vpn-bgp-ipv6
 - draft-ietf-l3vpn-rt-constrain
- **Can the int-area and rtg-area keep separate policies on this for routing protocols?**
 - No. We don't want to see "area shopping" for routing protocol extensions. We MUST work together on this.

Comments, Please

- Discussion with the rtg-area
 - routing-discussion@ietf.org
 - <http://rtg.ietf.org>
 - rtg-area open meeting this afternoon
- Open Mic here until end of session

End