

# Moving towards an IRS WG Charter

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# Some Thoughts on WG Charters

- WGs are generally most successful with well defined limited charters
  - Avoid spinning wheels, naval gazing
  - Avoid overlap with other WGs
- Charters specify “what we need to do now”
  - Can be updated for “what we want to do later”
- We need to avoid “boiling the ocean”

# Current Status

- BOF chairs have discussed a draft WG charter with ADs
- Draft charter was sent to WG email list
- Comments received (see following slides)

# Issue: Fast Path vs Slow Path

- “Thus, the IRS is a "fast path"... This differs from the programmatic "slow state" that is commonly a device's configuration interface..”
  - “Fast” vs “slow” is relative, causes are complex
  - We don’t want to confuse implementation versus standards
- We might drop this paragraph
  - Or say something like “don’t preclude fast path”

# Issue: Which Protocol

- Do we use an existing protocol(s), or define a new one?
  - The WG needs to figure this out
  - Initial charter does not allow us to define a new protocol, nor to change an existing one
  - If we need to change or enhance an existing protocol, we can update charters accordingly
  - If we need a new protocol, will need to update WG charter (for some WG)

# Issue: Use Cases

- From draft charter:
  - Tightly scoped key use cases for operational use of IRS. These use cases will include at least: ...
- Does this preclude other Use Cases?
- A: NO, but initially we will need to focus in order to make progress

Working Group Name:

Interfaces to the Routing System (IRS)

IETF Area:

Routing Area

Chair(s):

TBD

Routing Area Director(s):

Adrian Farrel <adrian@olddog.co.uk>

Routing Area Advisor:

Adrian Farrel <adrian@olddog.co.uk>

Operations Area Advisor:

TBD

Mailing Lists:

General Discussion: [irs-discuss@ietf.org](mailto:irs-discuss@ietf.org)

To Subscribe: <https://www.ietf.org/mailman/listinfo/irs-discuss>

Archive: <http://www.ietf.org/mail-archive/web/irs-discuss/current/maillist.html>

## Description of Working Group:

A routing system is all or part of a routing network such as an interface, a collection of interfaces, a router, or a collection of routers. Interfaces to the Routing System (IRS) facilitate real-time or event driven interaction with the routing system. These allow information, policies, and operational parameters to be injected into and retrieved (as read or notification) from the routing system while retaining data consistency and coherency across the routers and routing infrastructure, and between multiple interactions with the routing system.

~~Thus, the IRS is a "fast path" that can be used to program routing and policy state in a router using operational paradigms familiar to operators of traditional distributed devices. This differs from the programmatic "slow state" that is commonly a device's configuration interface because those mechanisms impose many transactional mechanisms and requirements, that may slow down the interaction.~~

The IRS working group works to develop a framework and architecture that will enable specific use cases, and lead to an understanding of the informational models and requirements for encodings and protocols. Small and well-scoped use cases are critical to constrain the scope of the work and achieve sufficient focus for the working group to deliver successfully. Initial work within the working group will be limited to within a single administrative domain.



The working group is chartered to work on the following items:

Architecture and framework for IRS including considerations of policy and security

Tightly scoped key use cases for operational use of IRS. These use cases will include at least:

- Interactions with the RIB

- Association of routing policies with routing state

- The ability to extract information about topology from the network. Injection and creation of topology will not be considered as an initial work item.

Other use cases may be adopted by the working group only after milestones have been added to the charter page.

Abstract information models consistent with the use cases

Requirements for IRS protocols and encoding languages

An analysis of existing IETF and other protocols and encoding languages against the requirements.

The working group is not currently chartered to develop protocols, encoding languages, or data models.

The objective of this work effort is to arrive at common standards for these items, but these items are dependent on the progress of the topics listed above. Work for these items will be conducted in this working group only after a re-charter, and/or may be carried out in another working group with specific responsibility for the protocol or encoding language.

## Goals and Milestones:

- <TBD>: Request publication of an Informational document defining the problem statement
- <TBD>: Request publication of an Informational document defining the architecture framework
- <TBD>: Request publication of an Informational document defining general RIB-based use cases
- <TBD>: Request publication of an Informational document defining policy-related use cases
- <TBD>: Request publication of an Informational document defining topology use cases
- <TBD>: Request publication of an Informational document defining the protocol requirements
- <TBD>: Request publication of an Informational document defining encoding language requirements
- <TBD>: Request publication of a Standards Track document defining a general information model
- <TBD>: Request publication of a Standards Track document defining an information model for RIB-based use cases
- <TBD>: Request publication of a Standards Track document defining an information model for policy-related use cases
- <TBD>: Request publication of a Standards Track document defining an information model for topology use cases
- <TBD>: Request publication of an Informational document providing an analysis of existing IETF and other protocols and encoding languages against the requirements
- <TBD>: Consider re-chartering