

Internet Area Meeting / Identifier-Locator Separation BOF

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The RAM List

<https://www1.ietf.org/mailman/listinfo/ram>

Agenda

Background and scope (ADs 10 min)

Routing issues of concern where id-loc split might play a role (Ward/Scudder 20 min)

High-level design space (Thaler 45 min)

Where are current work applies, and where we need work going forward (Nikander 15 min)

Discussion (45 min)

What we do next (ADs/chairs 10 min) – (Conclude the discussion, next steps, and try to read consensus)

Identifier – Locator Separation Work In the Internet Area?

Background and Scope

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Outline

- Why are we here?
- What's in scope?
- What's NOT in scope?
- What are the expected next steps?

Why Are We Here?

- A recent sense of urgency and wake-up call from the routing community regarding routing and addressing issues
 - 2006 IAB Workshop
 - Discussion on various lists, ram@iab.org, arch-d@ietf.org, etc.
 - A long list of gatherings and presentations in operator forums and elsewhere on this topic
- We need to decide if there is IP layer work that should take place because of this

Goals of the Next 2.5 hours

- Focus on design of identifier-locator separation
 - A new input: can we improve routing scalability?
- Take the path we have been on, incorporate new insights from the past six months of activity, and translate them into additional goals moving forward.
- Establish some of the high-level boundaries for our solution set
- Determine next short-term steps

Scope of the meeting

- Understand motivations for id-loc split
 - Listen to input from the core routing community
 - Consider other reasons to do more work in this space
- Architectural design discussion
 - Why, how, trade-offs, etc.
 - Refrain from specific protocol details as much as possible

High level boundary questions to keep in mind

- Do we need a network-based solution, host based solution, or both?
- What about “Mobility”?
- Traffic Engineering?
- NAT?
- ...

If we can answer just a few of these, we will have accomplished something

Initial Proposal from the ADs

We should start new work that

- Satisfies requirements from the routing community
- Can be deployed
 - What this means comes clearer in the subsequent presentations
- Allows applications to work unchanged
 - Might still allow enhanced APIs etc.
- Backwards compatibility with existing networks
 - IPv4, IPv6, NATs, etc.
- What we can we do from where we are today?

Next Steps

- Continue discussion on the RAM list
- Come to agreement on scope of the work that we want to do & write it down
 - What functionality is included?
 - What point in the design space?
- Charter a working group
- Engineering ideas and implementations are welcome even before a WG exists
- Research is also very welcome on this space; the RRG is for this

Discussion

Some Questions...

- Is there interest in forming a WG?
- Should we focus on a network or host approach?
- Assume that existing apps must continue to work (don't break the API)?
- Assume that an application identifier is an IPv4/IPv6 address? Should it be routable?
- Focus on IPv6 in the end sites?
- Timeframe of significant deployment?
- What have we missed?
- Interim meeting in May?