RSVP Working Group

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OPEN ISSUES IN RSVP SPECIFICATION

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Issues on Styles

- **Wildcard scope**

  -- Prevent auto-refresh loops and improper reservations for WF (and DF) style

  -- Routing of WF *ResvErr* messages

  -- Allow partial-wildcard scopes, e.g.,
  :port | addr: | addr_mask ?

  -- Put DF style back into the spec?

- **New styles?**

  -- Shared Explicit (SE) style?

Service Model Issues

- Provide optional positive ACK message for reservation?
- Deliver Resv message to sender application?

Functionality/Reliability Issues

- **Require RPF check on received messages?**
- **Need more than one repetition of Teardown?**
- **IP6 Flow IDs**

Security Issues

- **Security data:**

  -- Credential field contents

  -- Integrity field contents

- **Credential needed for Teardown?**

- **What if a credential changes?**

Soft-State Management Issues

- How to do fast repair: locally or end-to-end?

  (End-to-end would require small protocol addition)

- Best way to determine timeout parameters T, R?

Proposed WF style change

<style-specific-tail> ::=

<Style-WF> [<FILTER_SPEC>] <FLOWSPEC>

<SND_ADDR_LIST> |

5.14 SND_ADDR_LIST Class

o IPv4 SND_ADDR_LIST object: Class = 14, C-Type = 1

```
+-------------+-------------+-------------+-------------+
|              IP4 Src Address (4 bytes)    ..................... |
+-------------+-------------+-------------+-------------+
//                                          ..................... //
+-------------+-------------+-------------+-------------+
|                 IP4 Src Address (4 bytes) .................. |
+-------------+-------------+-------------+-------------+
```

SE (Shared Exclusive) Style

Shared **reservations,** ***Explicit*** **scope.**

<style-specific-tail> ::=

<Style-SE> <FLOWSPEC> <filter spec list>

- **Meaning: A single shared reservation of size <FLOWSPEC>, for explicitly-defined senders.**
- **API might allow wildcard scope, to be filled in by local RSVP daemon; from a user viewpoint, this could replace WF.**