

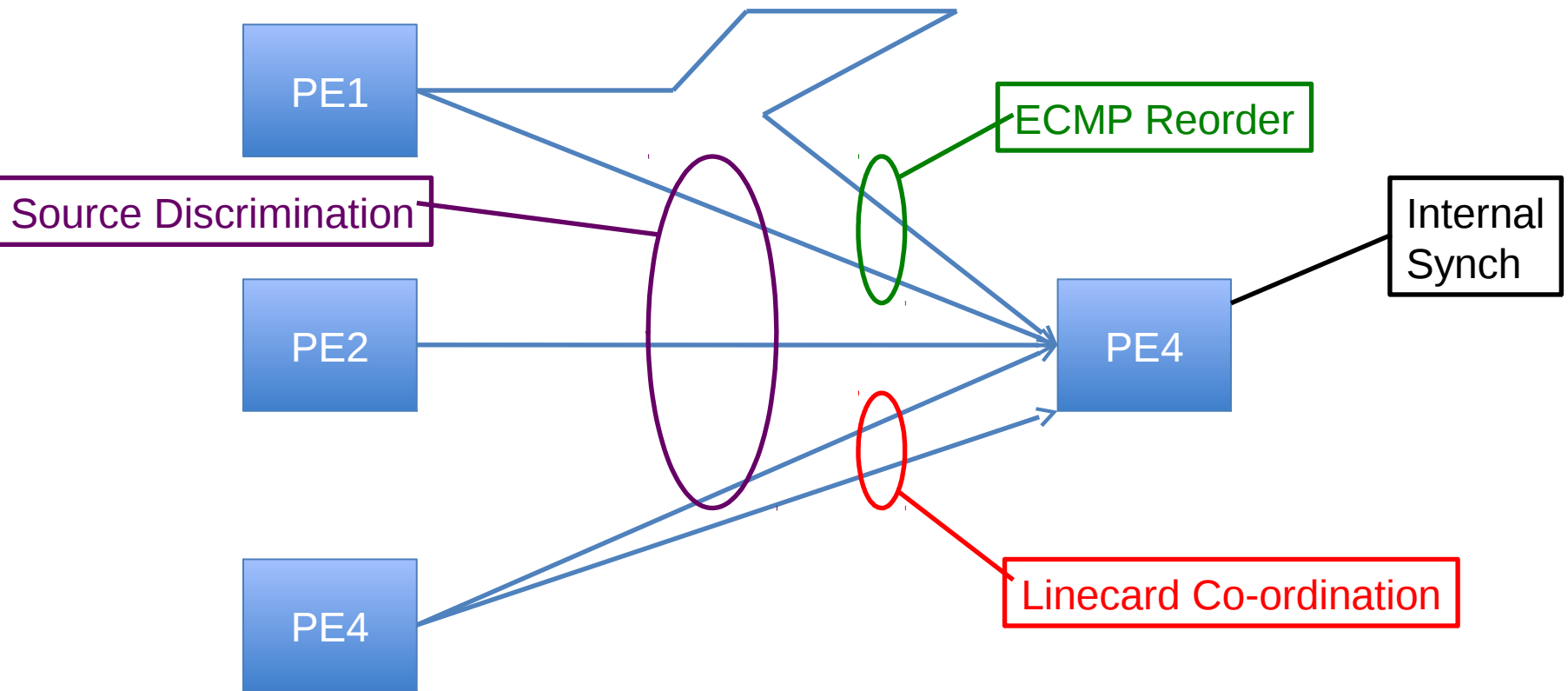
**[RFC6374](#) **Synonymous Flow Labels**  
**draft-bryant-mpls-synonymous-flow-labels-01****

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# The RFC6374 Problem(s) In Regular MPLS



# Synonymous Flow Label

A synonymous flow label (SFL) is a label that causes the Egress LSR to perform a previously agreed action **in addition** to processing and delivering the packet in exactly the same way as the label that it is synonymous with (except if the action says otherwise).

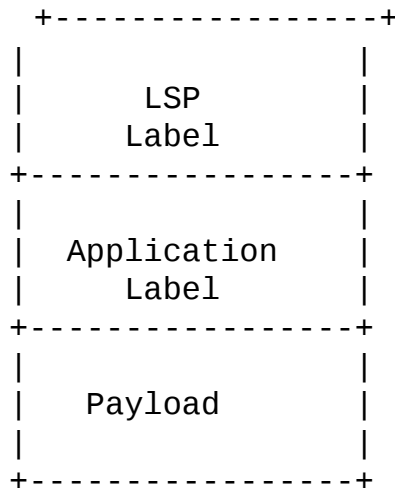
The action may be increment a counter, log a packet, or anything else that is agreed between the MPLS peers.

The additional action that RF6374 needs is the incrementing of a flow specific counter, something that many LSRs can already do!

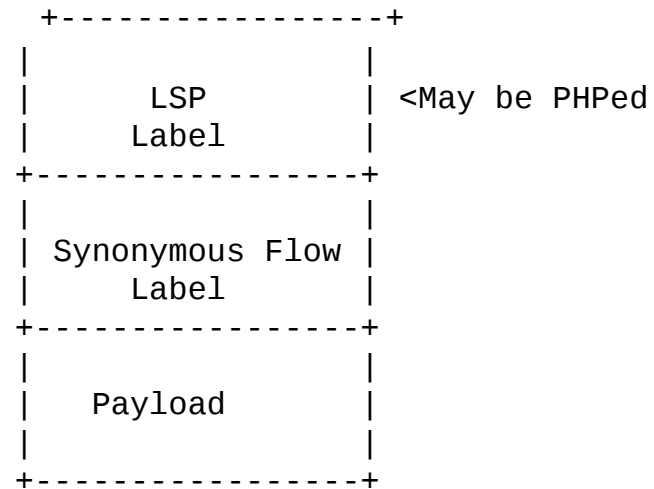
# Other Possible Synonymous Actions

- Record this packet
- Get IPFIX to look at this packet
- DPI this packet
- Send this packet for DOS washing
- .....

# Synonymous with Application Label

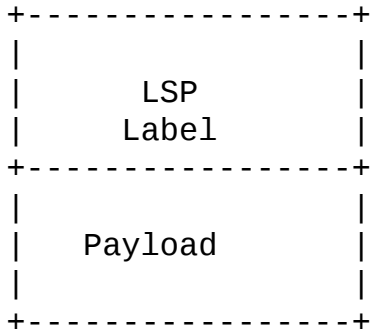


"Normal" Label Stack

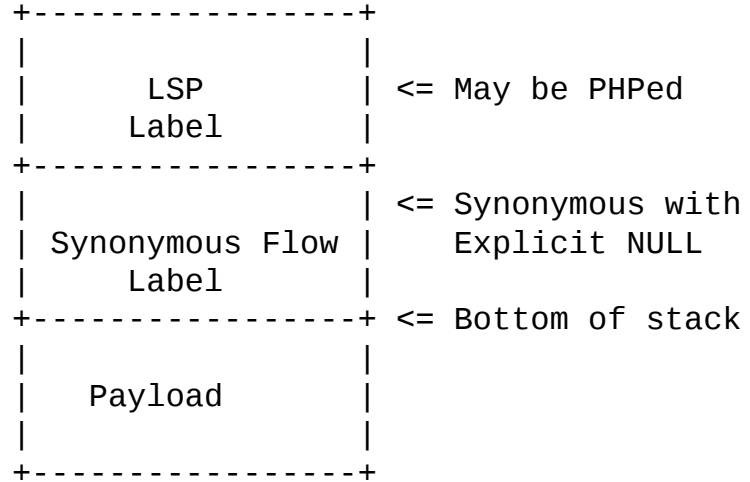


Label Stack with SFL

# Single Label Stack

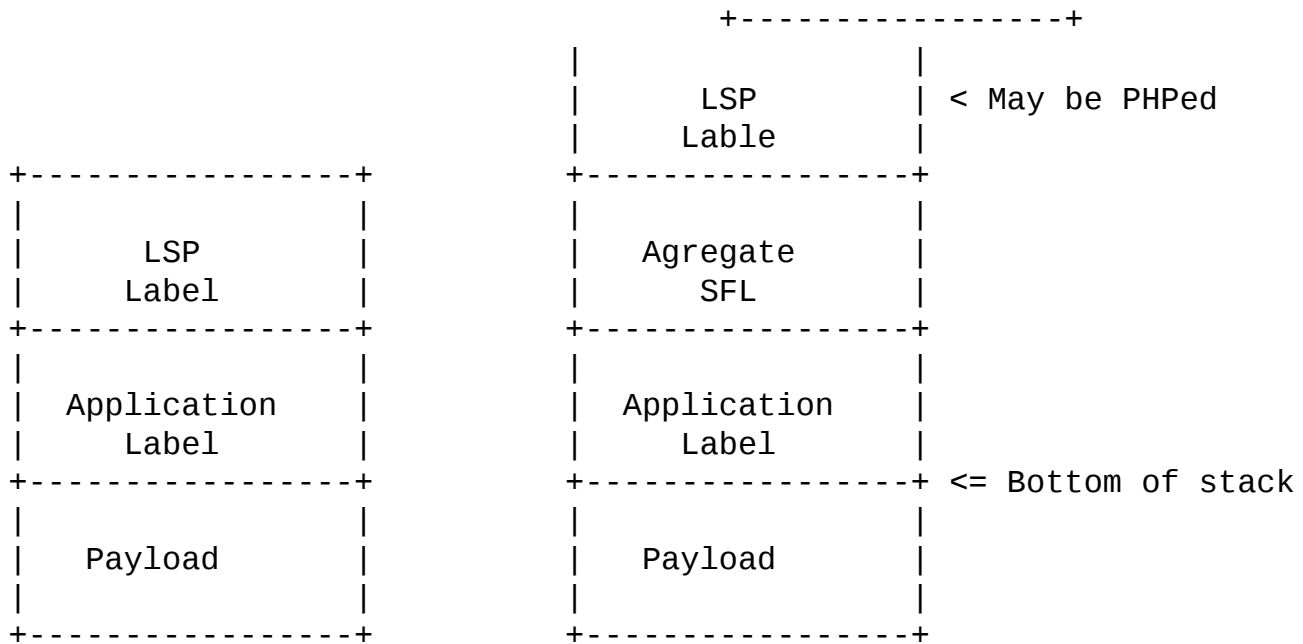


"Normal" Label Stack



Label Stack with SFL

# Aggregate Label Stack



"Normal" Label Stack

Label Stack with SFL

# ECMP

The addition of an SFL may cause a change to the path through the network due to the change in the packet entropy value. **IF** this is a problem

- Always include the SFL or
- Use an RFC6790 entropy label



# A Rose By any Other Name

adjective: **synonymous**

1. (of a word or phrase) having the same meaning as another word or phrase in the same language.
2. closely associated with or suggestive of something.

It has been suggested that definition (1) is not a good fit for what we are doing. Definition (2) works or we could move to something like “shadow”.

# Next steps

- 1) Revisit the requirements draft (draft-bryant-mpls-flow-ident)
  - Is that correct and complete?
  - Do we publish, or merge into this. or let the draft die?
- 2) Decide if this draft the approach we wish to follow
  - How much more should the authors do before handing control the the WG.
- 3) Design the control system.
  - Let's discuss on the list
  - We will have a draft(s) for Japan, and welcome inputs from the WG.