

draft-litkowski-idr-bgptimestamp-01

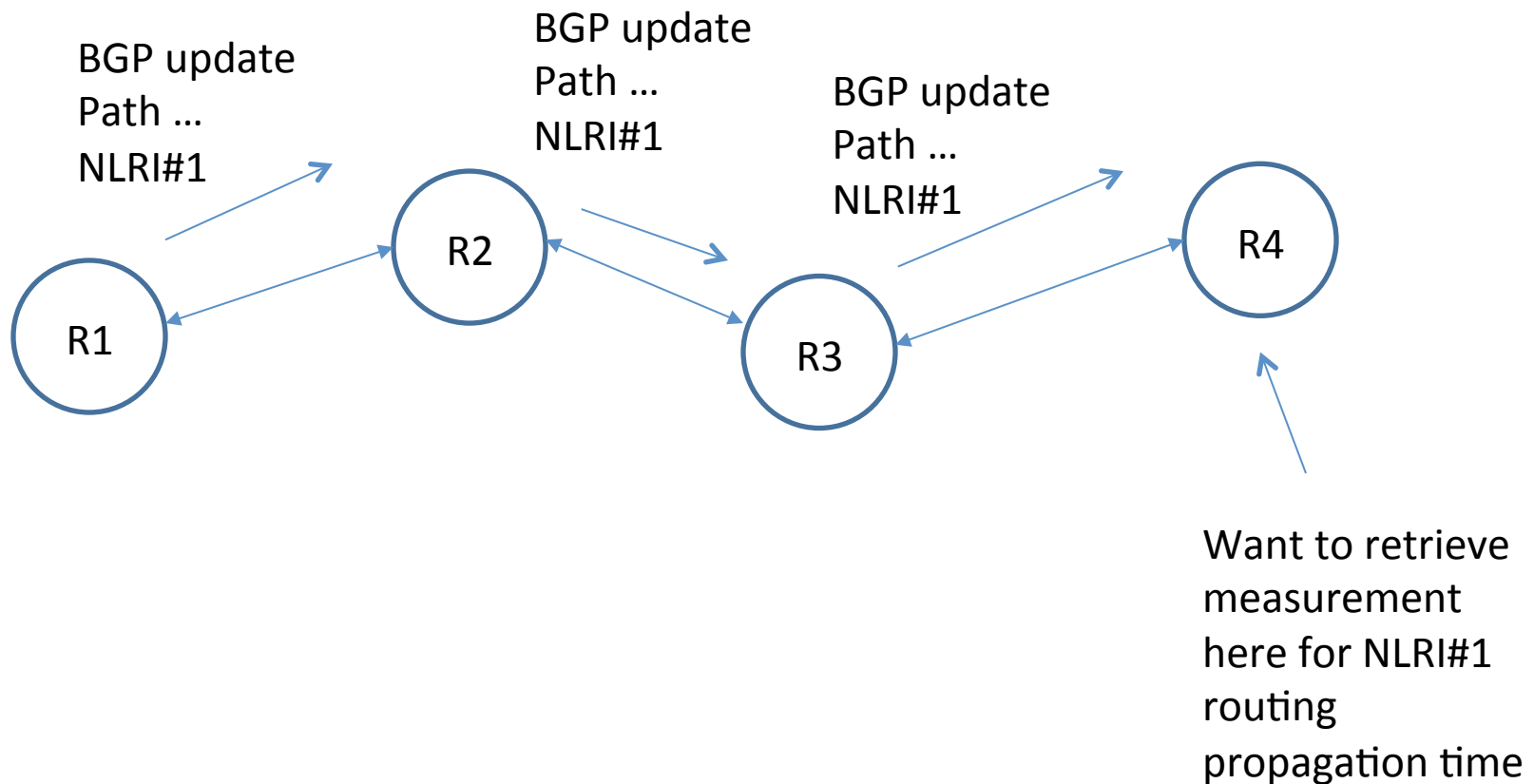
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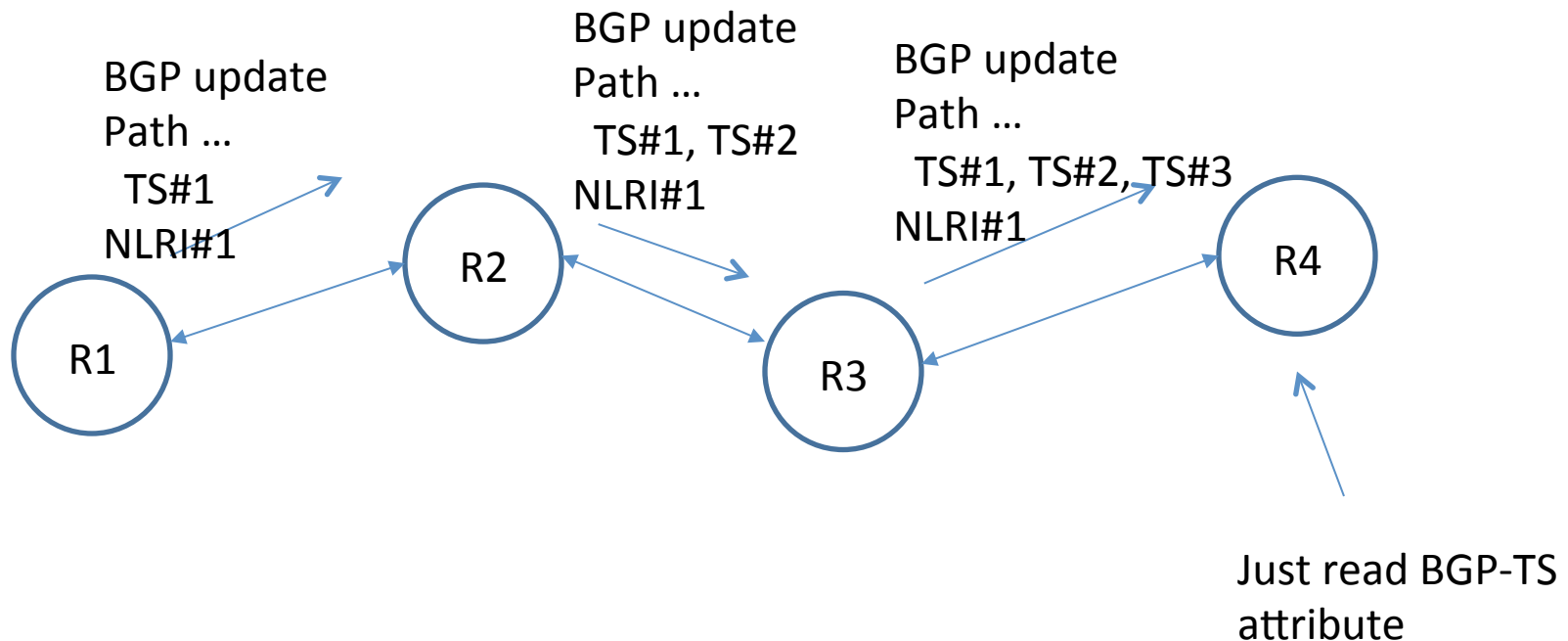
Problem statement

- Need to be able to measure propagation time of routing information



Proposed solution

- New BGP attribute : BGP-TS
- Use a timestamp vector that will be updated by each BGP Speaker in the path vector.



Changes from -00

- We took into account comments from WG :
 - Adding send timestamp as it sounds possible from implementation point of view, also giving some constraint on where the send timestamp should be applied
 - Add a section about limiting churn :
 - BGP-TS attribute must not be taken into account when evaluating the need to send a new update (prevents duplicate updates that would just update timestamp)
 - Add a section about update packing :
 - Not considered as critical as we are targeting some NLRIs to be monitored, so only those NLRIs will not be packed
 - Changed encoding to fit send timestamp and more optimized (may require still some work, but not a focus now)

Changes from -00

- Adding procedures to manage stale timestamp :
 - Stale indicator
 - Stale indicator is inserted when :
 - A path is received or originated, and decision process does not select it as best
 - A path is received or originated, and decision process select it as best, the path must be exported and then stale indicator is inserted.

Next step

- Requested feedback from BMWG about accuracy of the solution => no feedback yet
- Comments from WG required to progress
 - Do you find it accurate enough ?
 - How would it impact implementations ?
 - Others ?