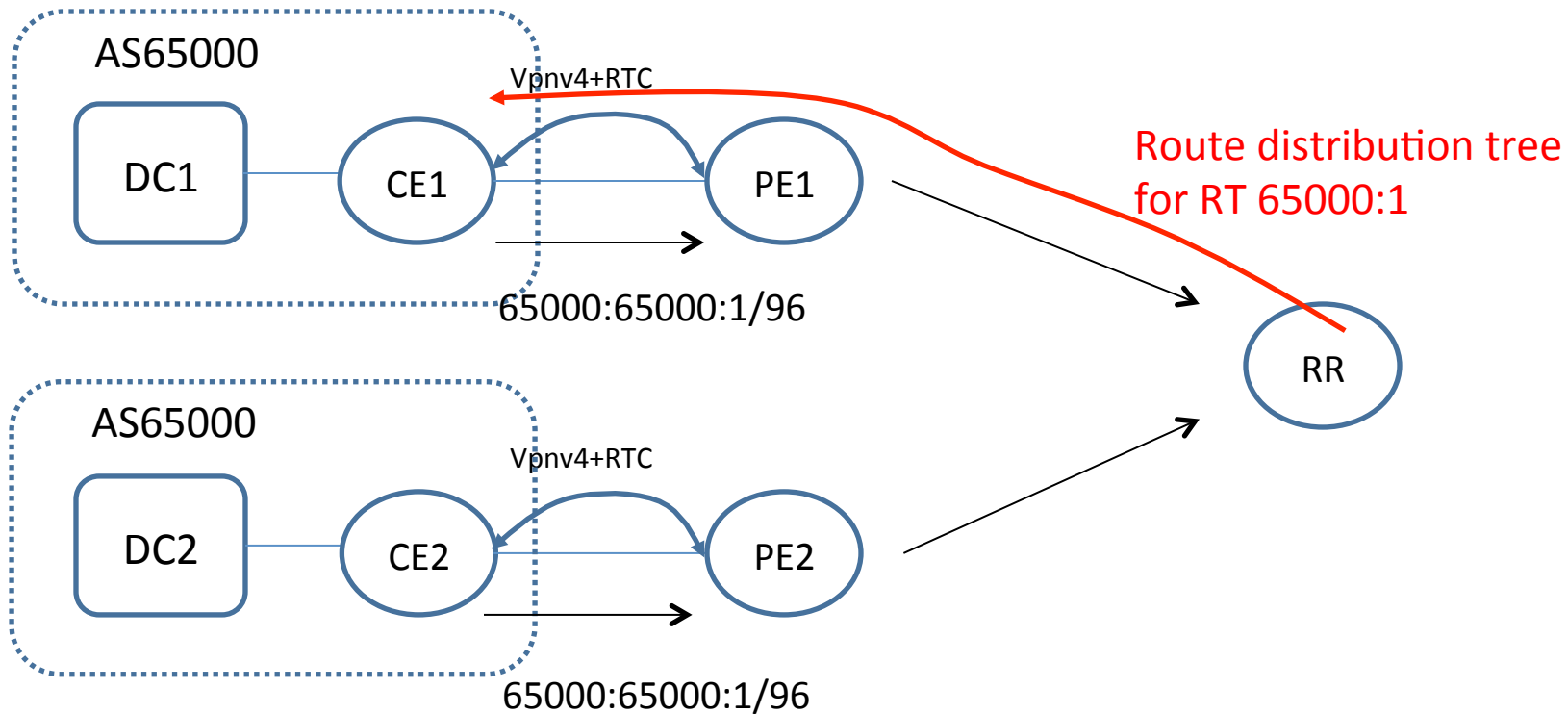


# draft-litkowski-idr-rtc-interas

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# Problem statement



When disjoint ASes setup is used, route distribution tree is wrongly built, preventing communications between sites

# Problem statement

- RFC4684 Section 3.2 defines :

"As indicated above, the inter-AS VPN route distribution graph, for a given route-target, is constructed by creating a directed arc on the inverse direction of received Route Target membership UPDATES containing an NLRI of the form {origin-as#, route-target}.

Inside the BGP topology of a given autonomous-system, as far as external RT membership information is concerned (route-targets where the as# is not the local as), it is easy to see that standard BGP route selection and advertisement rules [4] will allow a transit AS to create the necessary flooding state."

- For external RT membership, distribution tree is built over shortest path

# Problem statement

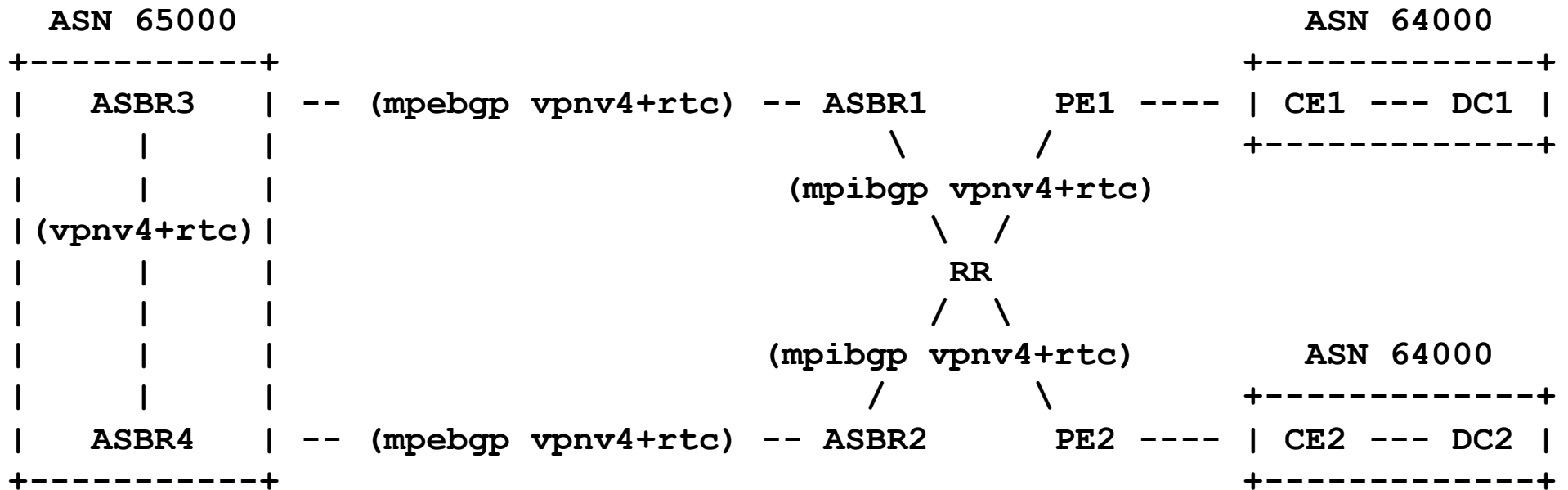
- The other rules defined in Section 3.2 of RFC4684 seems to not apply to external informations

“Route Target membership information that is originated within the autonomous-system, however, requires more careful examination. “

# Proposal

- Rules defined in RFC4684 Sec 3.1 & 3.2 are modified
- Path pruning may be disabled by user configuration for :
  - Specific AS numbers (different from local AS)
  - All private ASes

# Proposal



In this situation path pruning may be disabled for AS64000 but enabled for AS65000.

Disabling pruning for all privates Ases, would create unnecessary flooding states in this scenario.

# Conclusion & Next steps ...

- Basic specification sounds broken for disjoint ASes case (very familiar case in VPN environment)
- WG Feedback on our proposal ?