draft-kompella-mpls-larp-08

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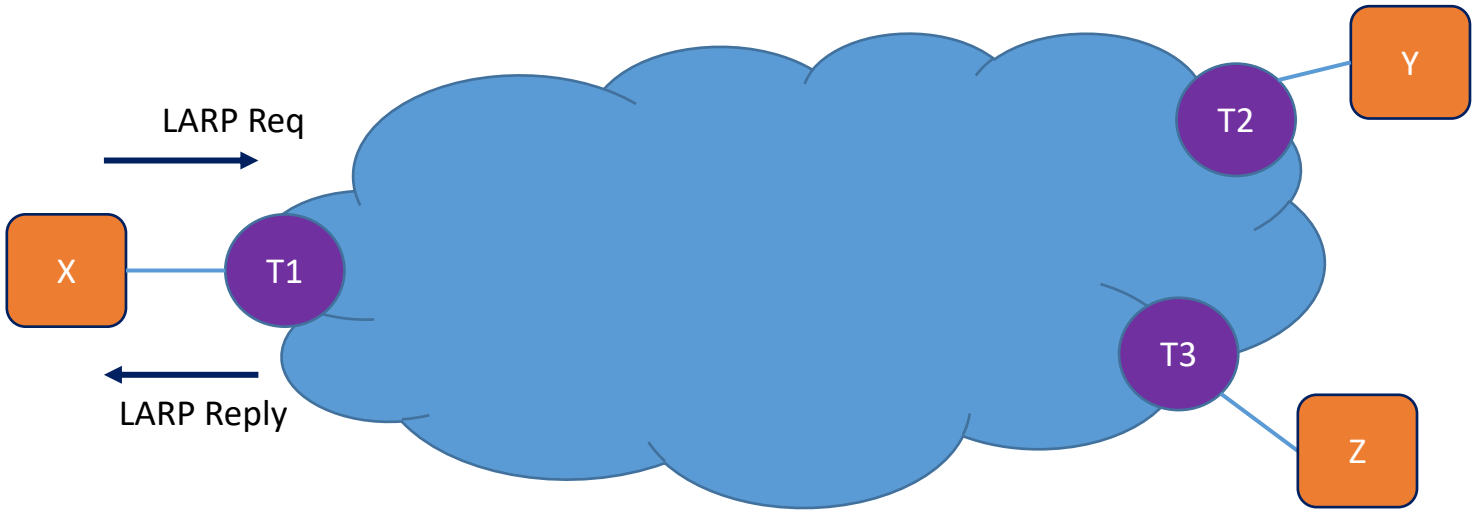
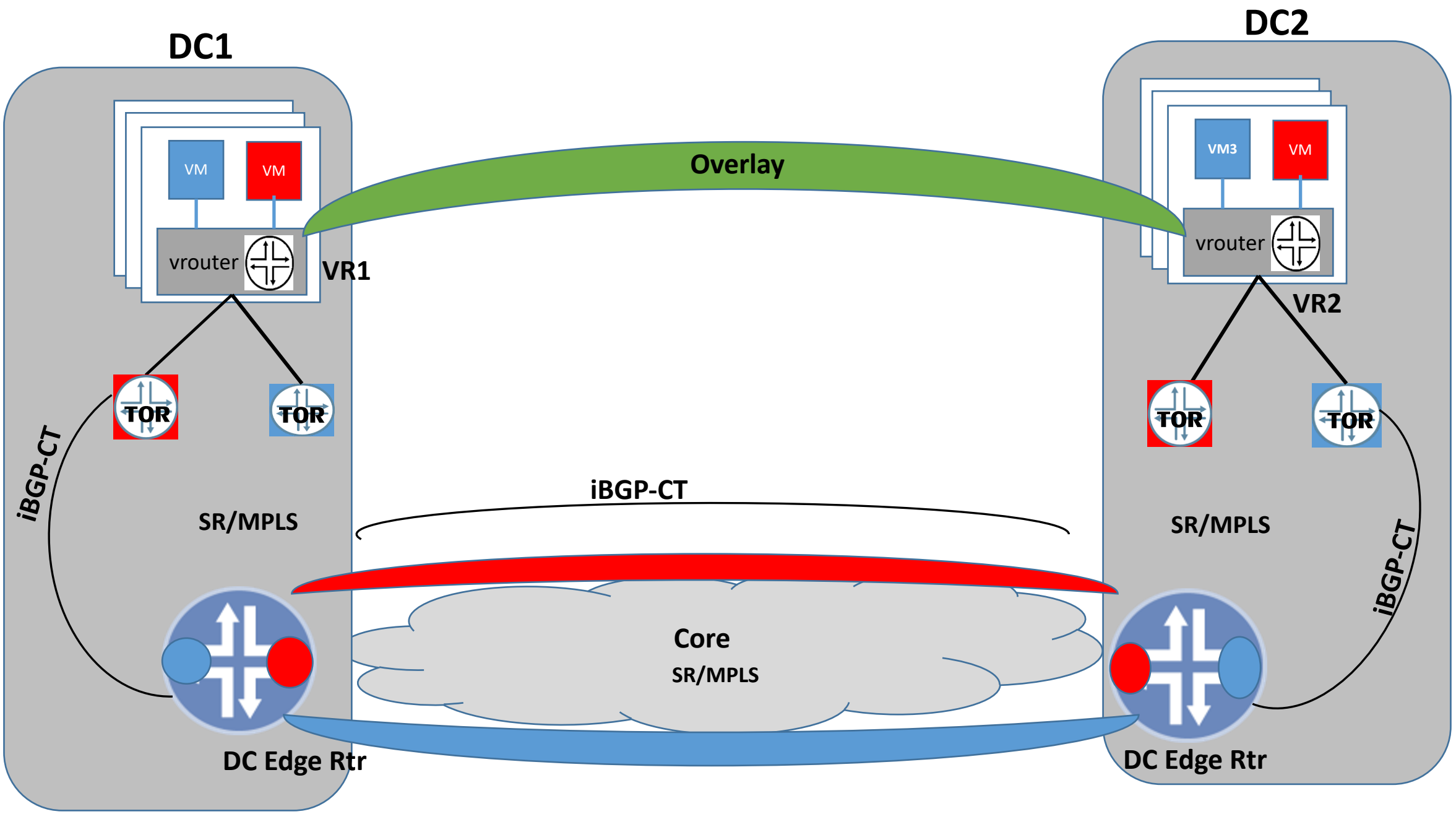
RECAP



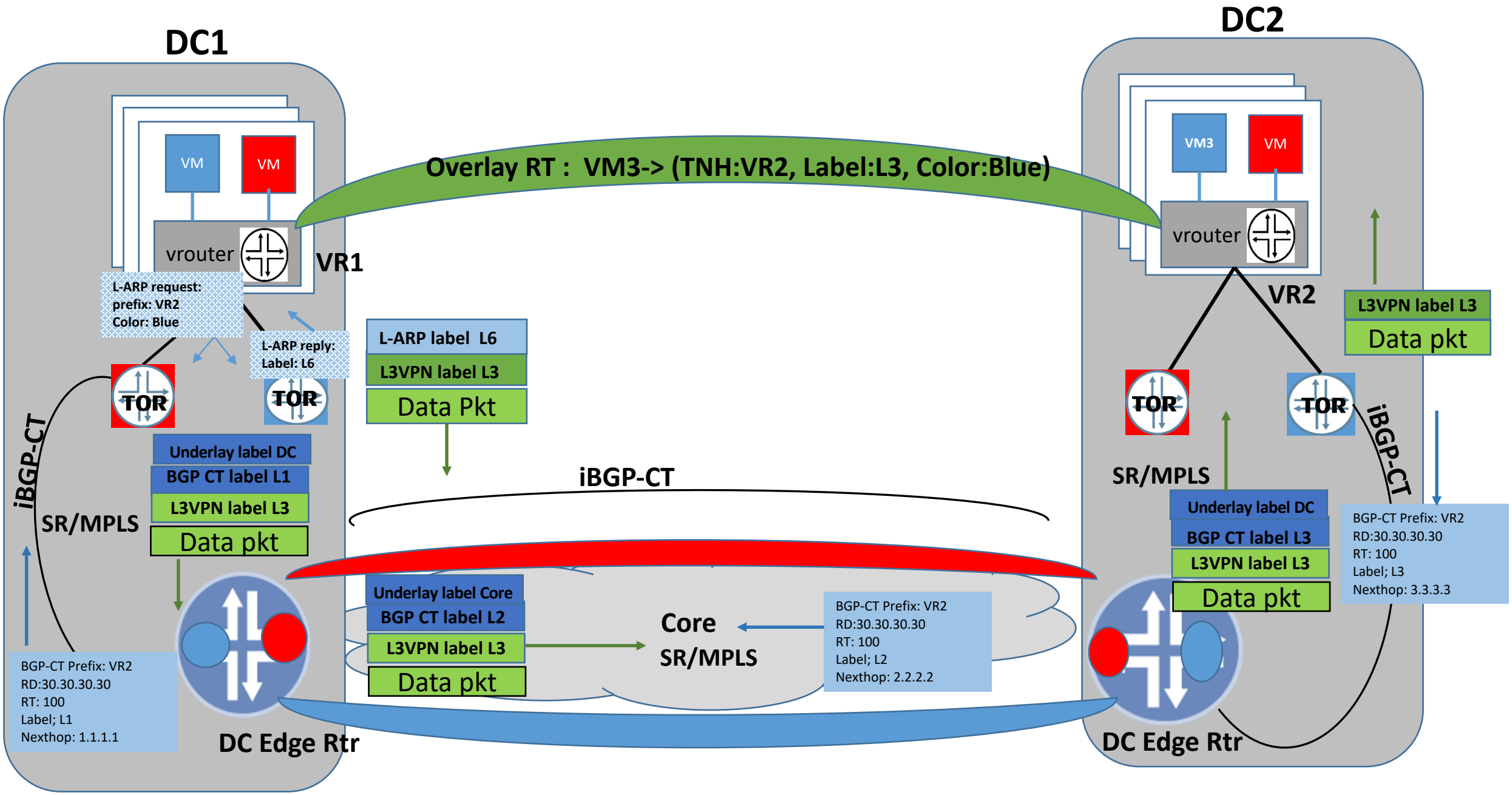
- Extension to ARP to distribute MPLS labels for v4 and v6 host addresses.
- Positioned to be used in servers that doesn't want to run routing protocols but want to participate in MPLS fabric
- In the fabric, tunnels could be created using any signaling protocol such as LDP, RSVP, BGP-LU or SPRING.

UPDATES FROM INTERIM MEETING

- Provision for optional attributes via TLVs in LARP request/response.
- Draft defines the “CT” TLV as an optional attribute.
- CT TLV is of length 4 bytes and value carries the CT attribute as defined in I-D.kaliraj-idr-bgp-classful-transport-planes.
- CT TLV allows LARP-client to request multiple labels to a given destination, each over a tunnel in the transport class given by CT (plus an “uncolored” label)
- LARP Server on receiving the request finds or creates a tunnel to the destination routed over the CT transport plane .
- LARP Server allocates label L inserts an entry in LFIB to swap L to this tunnel and sends same in reply.



- Enabling MPLSoMPLS across computes



- Enabling MPLSoMPLS across computes

OTHER DEVELOPMENTS AND FUTURE WORK

- Linux prototype for basic LARP server and client is available.
- Prototype for Tungsten fabric/Contrail with Openstack to enable MPLSoMPLS overlay using LARP is in progress.
- Extensions to linux prototype for metric and color support.

- Protocol details need to be ironed out
  - Multihomed servers (L-ARP clients)
  - Label withdrawal and persistence
  - Modes of triggering proxy label advertisement via LARP.
  - Working with other server side protocols to determine reachability.

Comments and suggestions are welcome

Thank you