

Line Identification in ND messages

draft-krishnan-6man-rs-mark-01

Suresh Krishnan

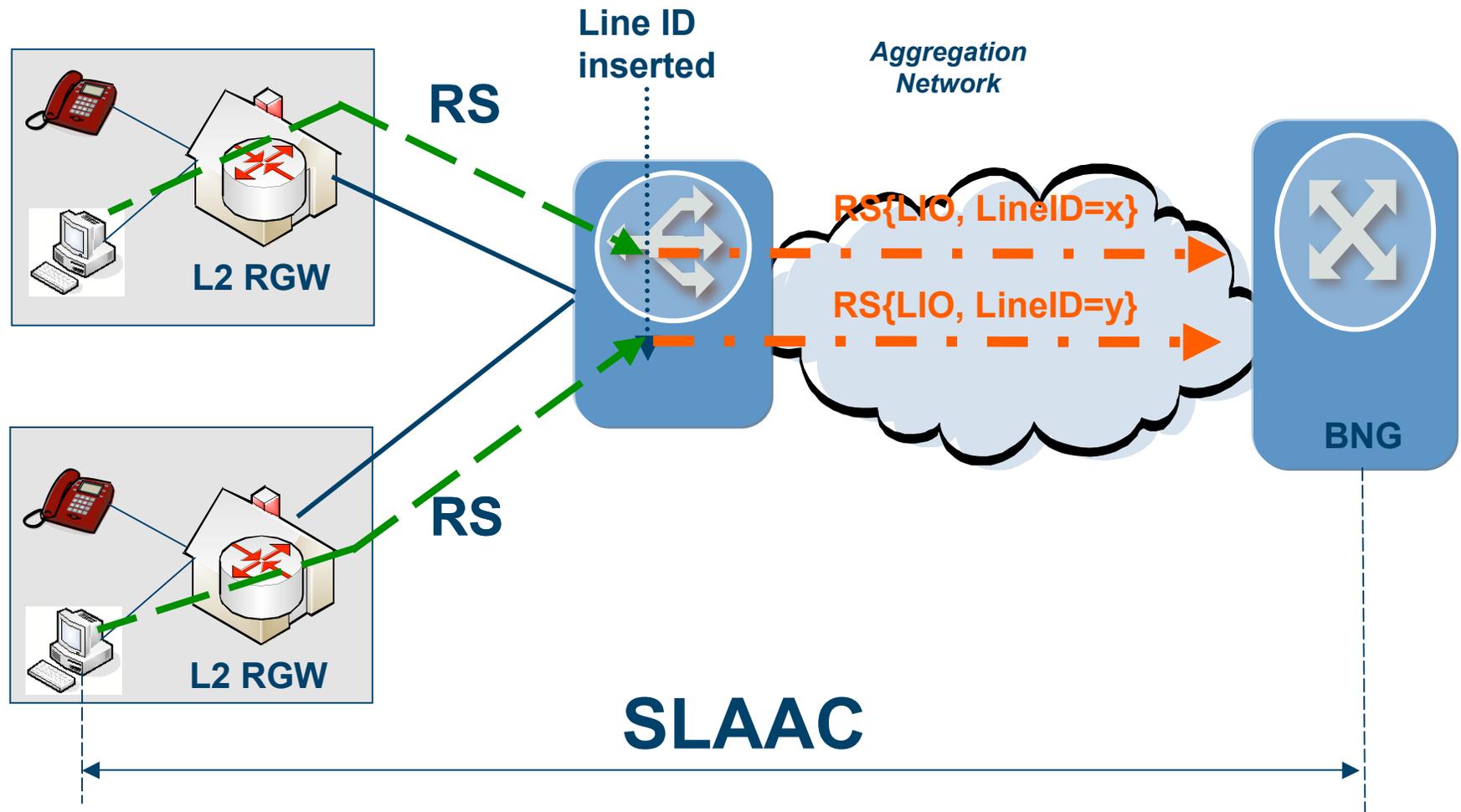
Problem

- Broadband forum supports an n:1 vlan model
 - Multiple subscriber premises on same VLAN
- Edge Router cannot differentiate between multiple subscriber premises
- Edge Router needs to allocate different prefixes for different subscriber premises

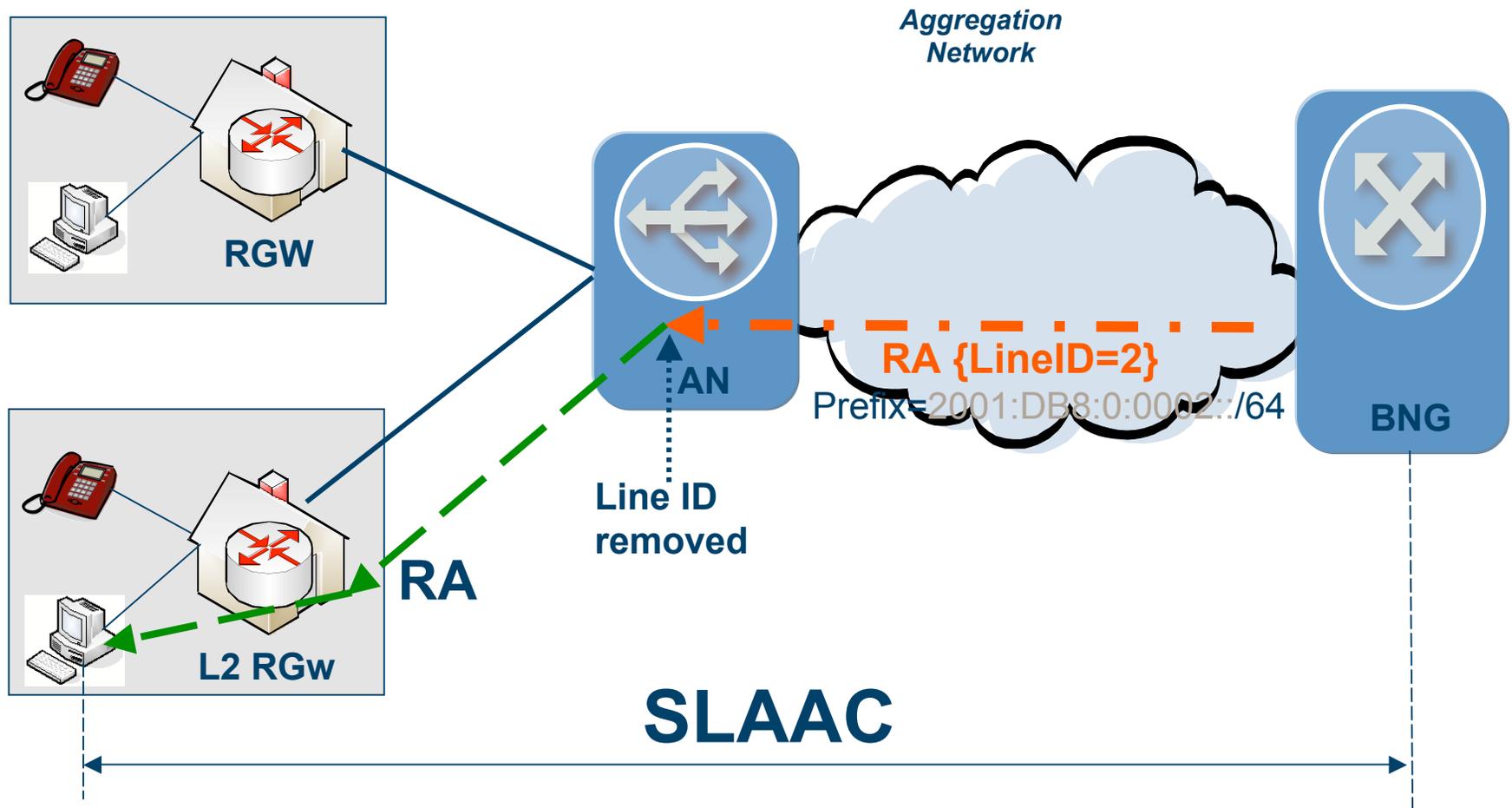
Proposed solution

- Edge router needs to be able to identify the subscriber line
- Only node aware of this information is the access node
- The proposed solution
 - Requires the Access Node to mark the RS packets
 - Requires the Edge Router to mark the RA packets
 - Requires behavior changes on the AN and the edge router

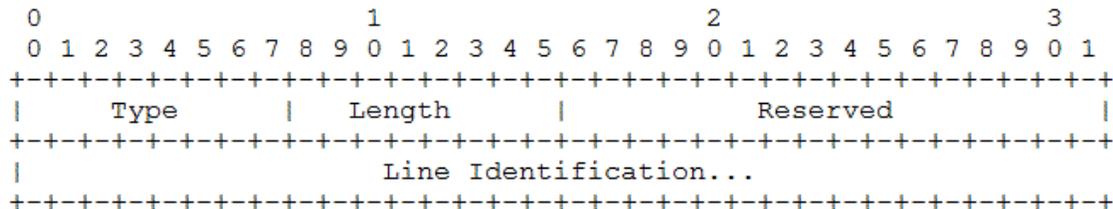
Line ID in Router Solicitations



Line ID in Router Advertisements



Line Identification Option



Type

8-bit identifier of the type of option. The option identifier for the line identification option will be allocated by the IANA.

Length

8-bit unsigned integer. The length of the option (including the type and length fields) in units of 8 octets. The value 0 is considered invalid.

Line Identification

In a Router Solicitation:

Variable length data inserted by the Access Node describing the subscriber agent circuit identifier corresponding to the logical access loop port of the Access Node from which the RS was initiated.

In a Router Advertisement:

Variable length data inserted by the Edge Router describing the subscriber agent circuit identifier corresponding to the logical access loop port of the Access Node on which the RA needs to be sent out.

Next Steps

- Will be discussed at the BBF this week in Hawaii
- Any issues with this approach?
- Adopt as wg item?