

Service Specific Routing

JOSE MONTERROSO

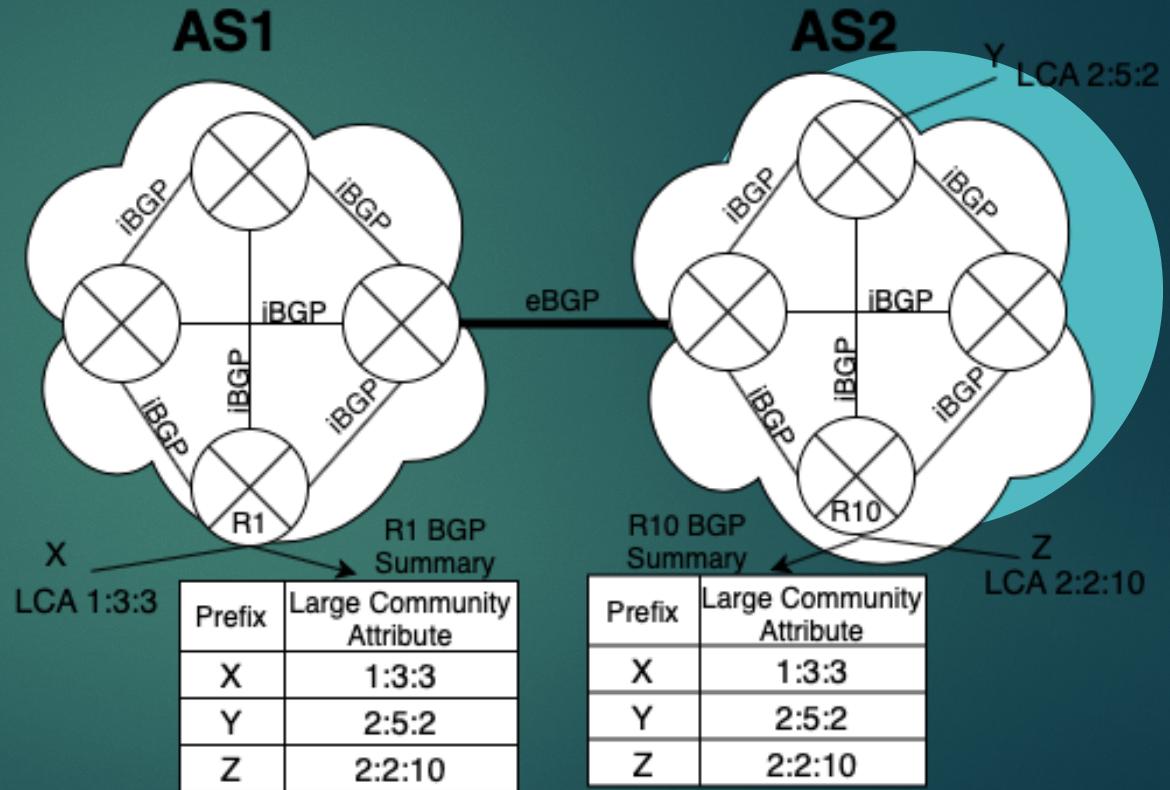


Introduction

- ▶ Today's routing involves the 'message in a bottle' approach
 - ▶ Heavily rely on routing tables to push packets towards destination
- ▶ No matter what type of service the traffic is, all traffic is treat the same
- ▶ Need a more granular approach – Service Specific Routing
 - ▶ Urgency and priority

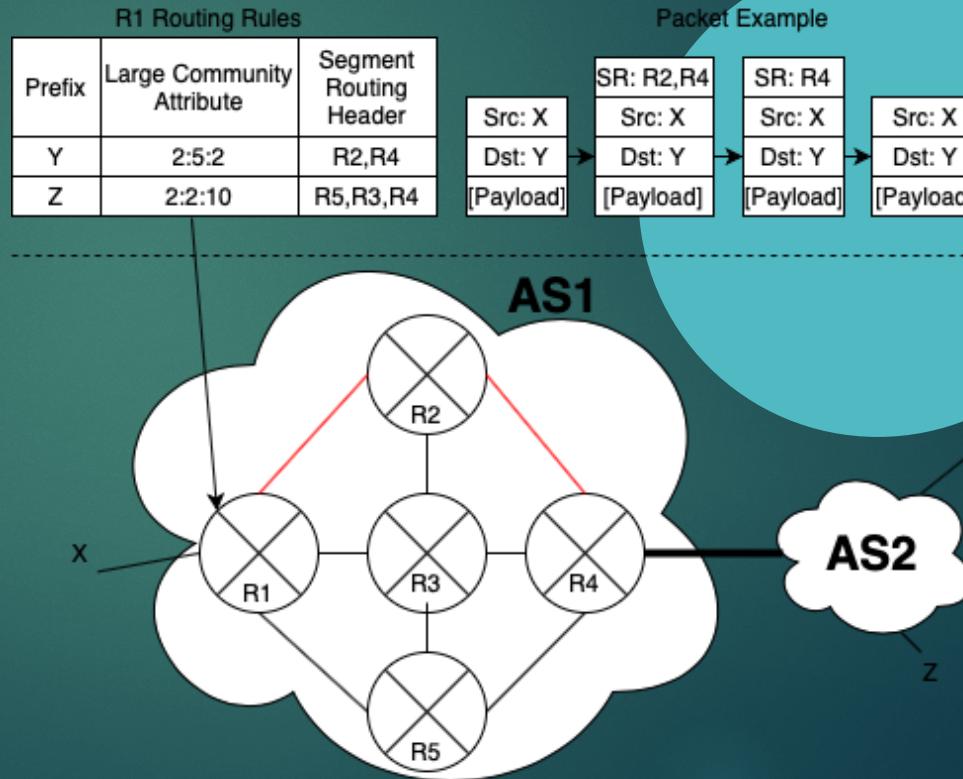
Background

- ▶ Border Gateway Protocol
 - ▶ De Facto EGP
 - ▶ Large Community Attribute
 - ▶ eBGP, iBGP



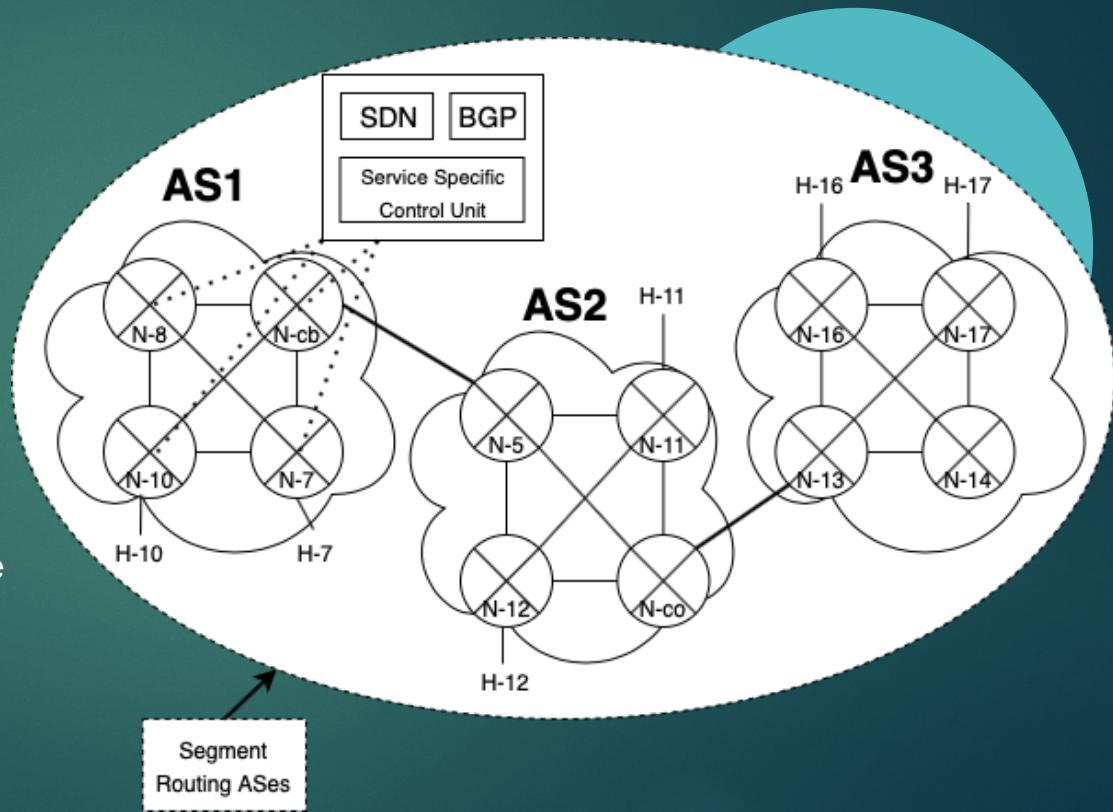
Background

- ▶ Segment Routing
 - ▶ Ordered list of Segments
 - ▶ Segment Routing Header
 - ▶ Prepended header
 - ▶ Encapsulated Packet



Approach

- ▶ BGP
 - ▶ Prefix Advertisement
 - ▶ Large Community Attribute
- ▶ Segment Routing
- ▶ SDN
 - ▶ Match Packet to SRH
- ▶ Service Specific Control Unit
 - ▶ Uses Large Community Attribute
 - ▶ Automates creation of SRH



Questions?

