RSVP Project

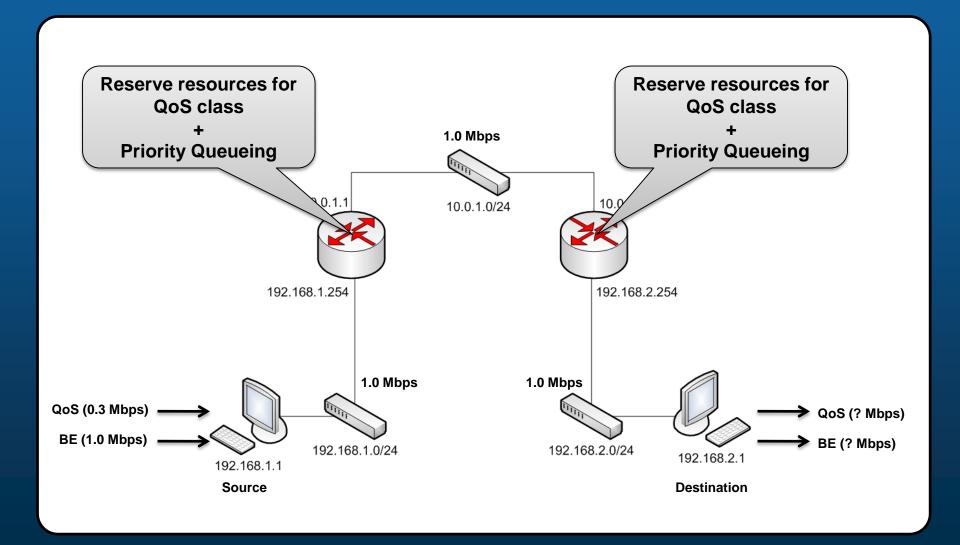
Telecommunicatiesystemen

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Example Network





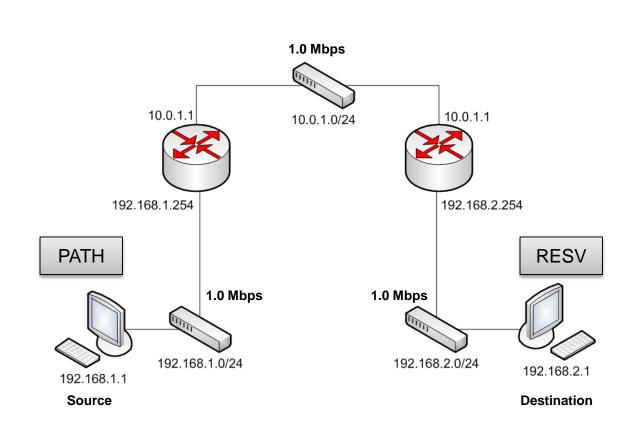
RSVP



- Resource ReSerVation Protocol
- Some key properties
 - Simplex flows
 - Receiver-initiated
 - Not a routing protocol, reservation signaling only
 - An internet control protocol like ICMP, IGMP or routing protocol

RSVP Host Model





RSVP Signaling



- Successful reservations are acknowledged by
 - Confirmation messages
- PATH and RESV messages
 - Periodically sent along the path
 - Keep alive state information
- Reservations are removed by
 - Explicit Teardown messages
 - Soft Timers (missed K PATH messages)

A simple DiffServ QoS solution



- We support only 2 traffic classes
 - Quality of Service
 - Best Effort
- Reservations
 - Adds resources to the QoS class
 - All sessions are mapped on the QoS class
 - Session id = (DestAddr, ProtocolD, DstPort)
- When a reservation is removed
 - Resources are removed from the QoS class
- No differentiation is made between QoS traffic

QoS class in IPv4 header



IPv4				
4 IHL ToS		Total Length		
Identification		flags	Fragment Offset	
TTL	Protocol	Header Checksum		
Source IP Address				
Destination IP Address				
Options (if a				Flow ID
Data				

Result



