

# Routing outgoing packets in multiaddressed hosts

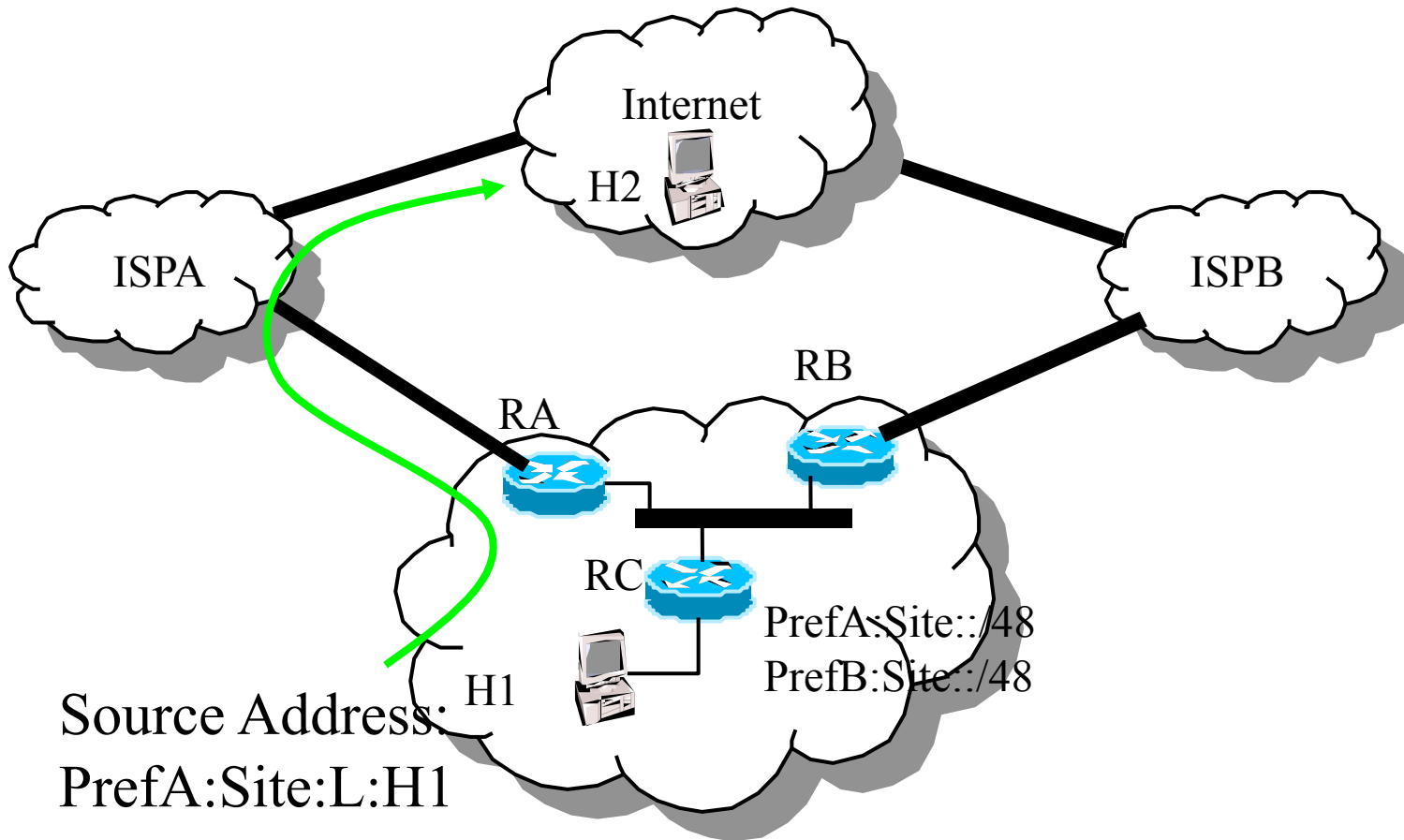
INT AREA

IETF 78 - Maastrich

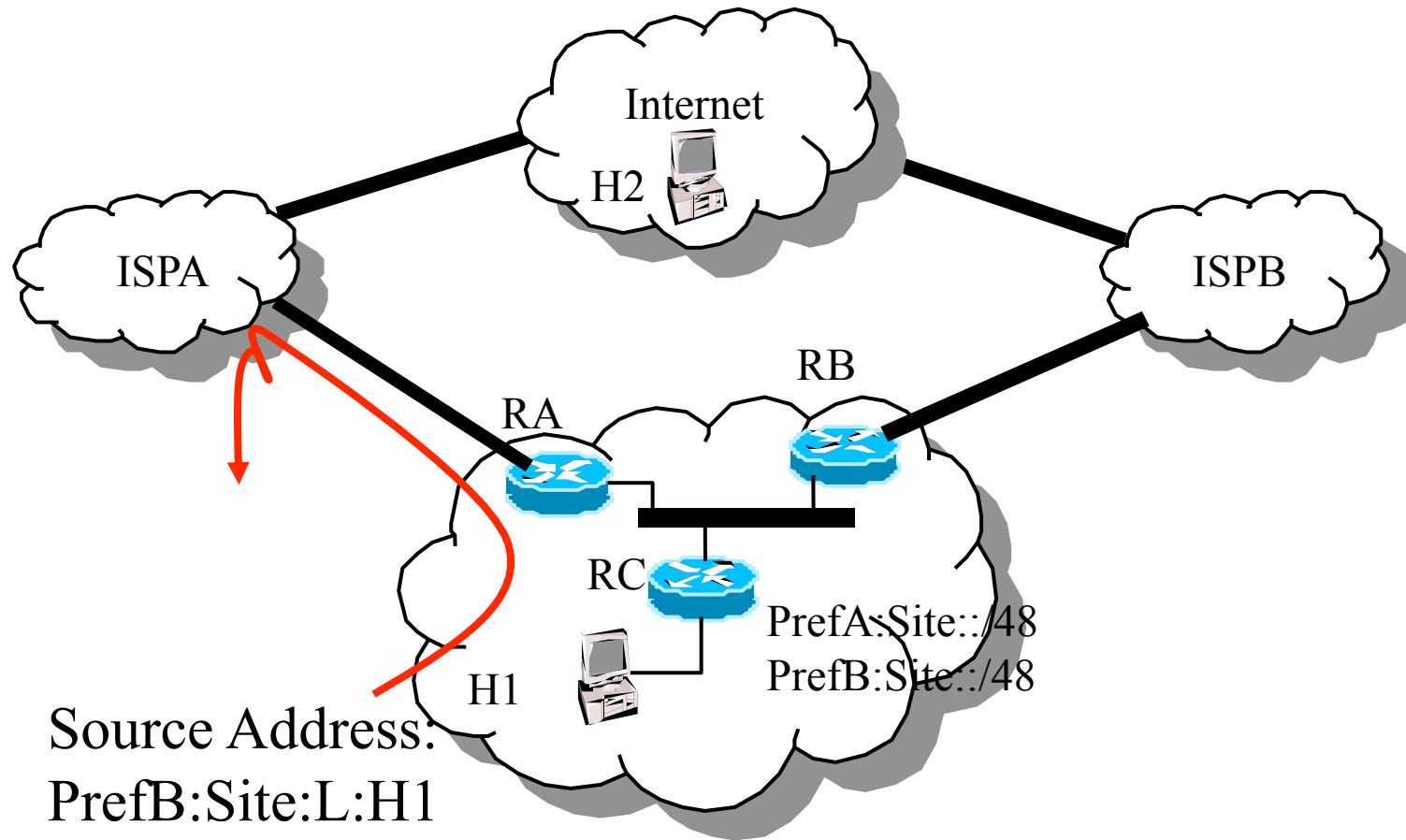
# Application scenarios

- Host with multiple addresses which belong to different path (don't have to be completely disjoint, but must not be equal)
  - because they belong to a multihomed site which has multiple PA block (each one belonging to a different ISP)
- This is the configuration assumed for MPTCP, SHIM6, HIP, SCTP and probably others to come

# Ingress filtering compatibility



# Ingress filtering Compatibility

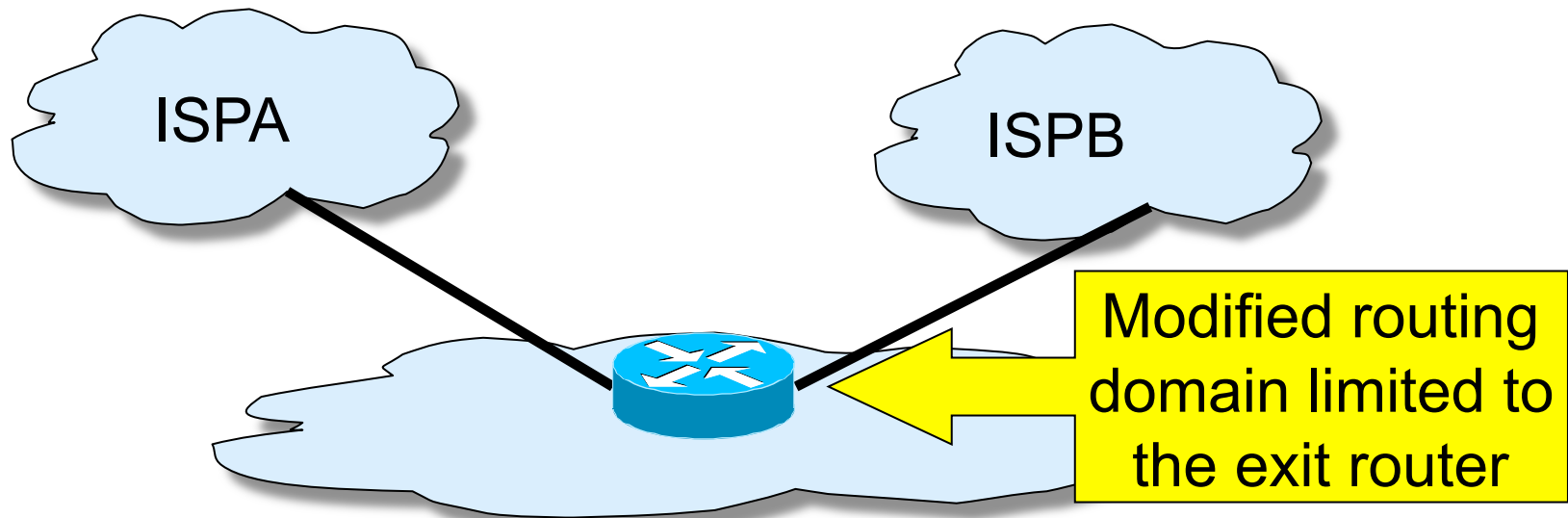


# Site Exit Path selection

- Two motivations for empowering the multihomed host to select the site exit path
  - Provide ingress filtering compatibility
    - The selection of the source address determines the exit path to be used to route the packets
  - Enable the host to try different site exit routes
    - These protocols assumes that changing the address pair implies changing the path used
      - For the site exit path, changing the source address should imply changing the site exit
- The source address needs to influence the routing somehow

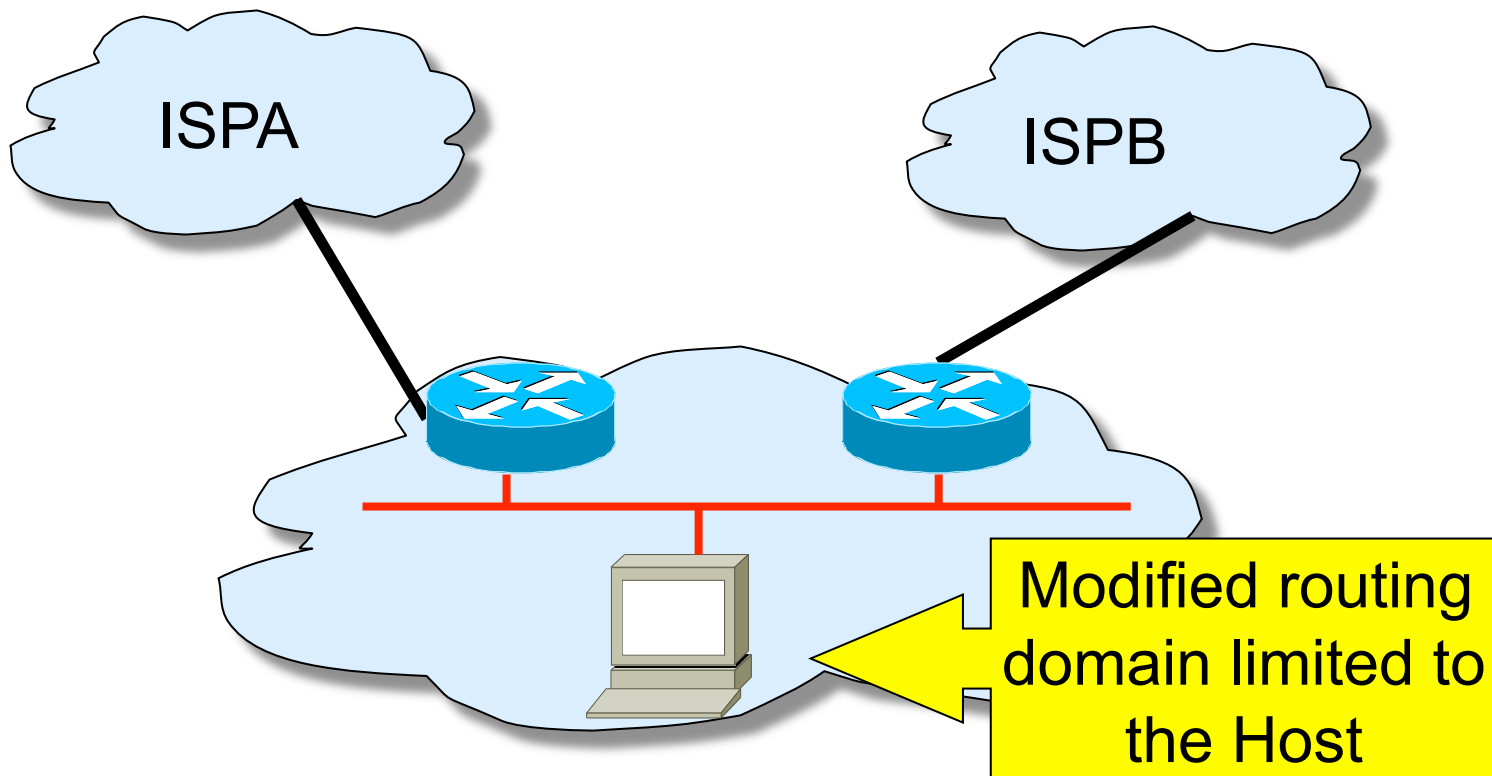
# Scenarios

## 1 - Single Exit router



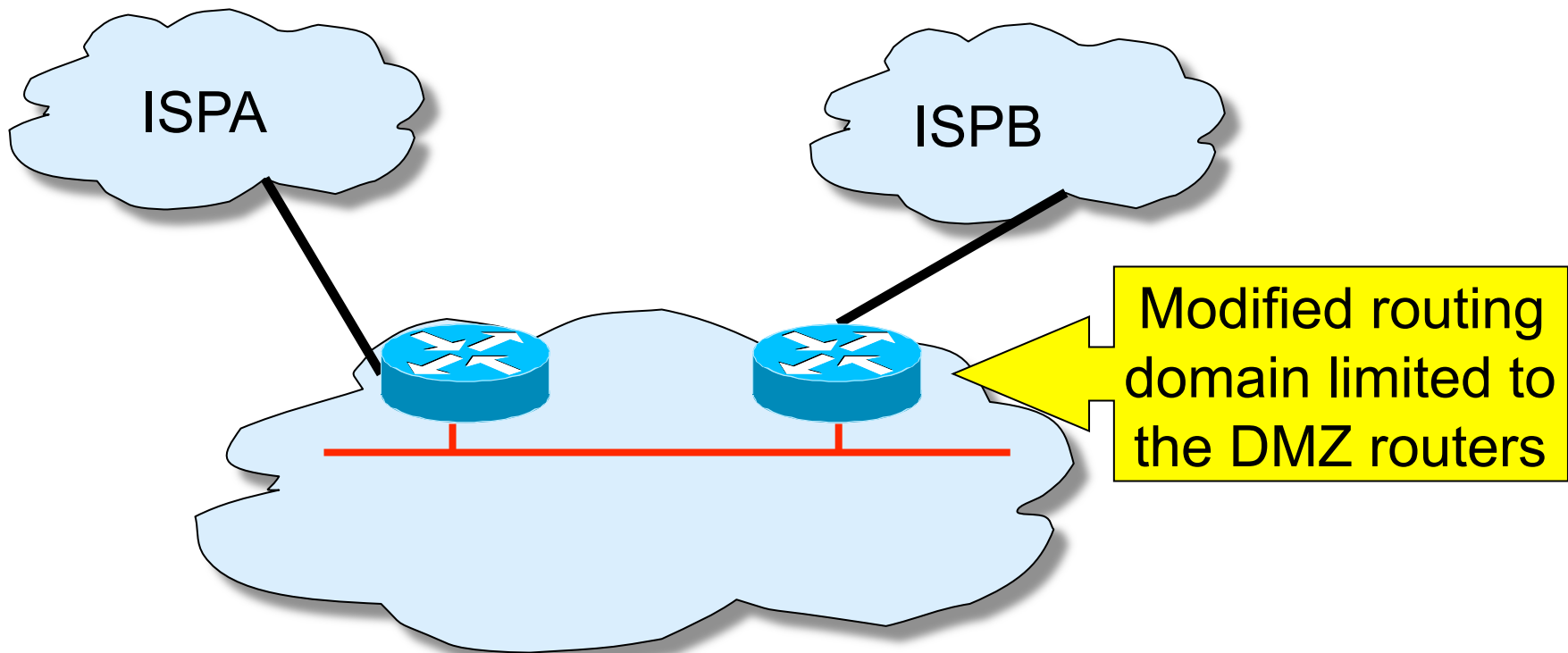
# Scenarios

## 2 – Host with meaningful next hops



# Scenarios

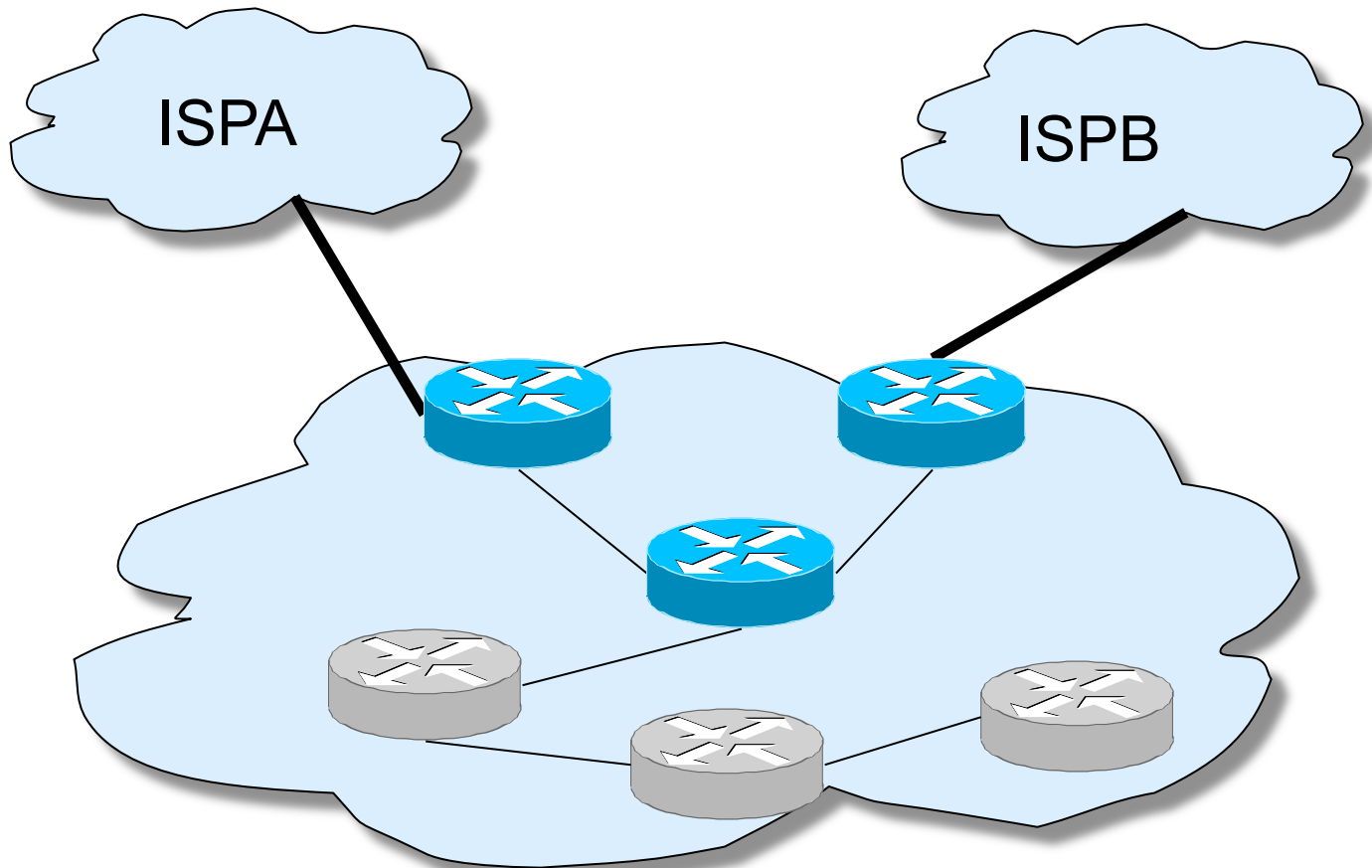
## 3 - DMZ





# Scenarios

## 4 - General case



What to do with this problem?