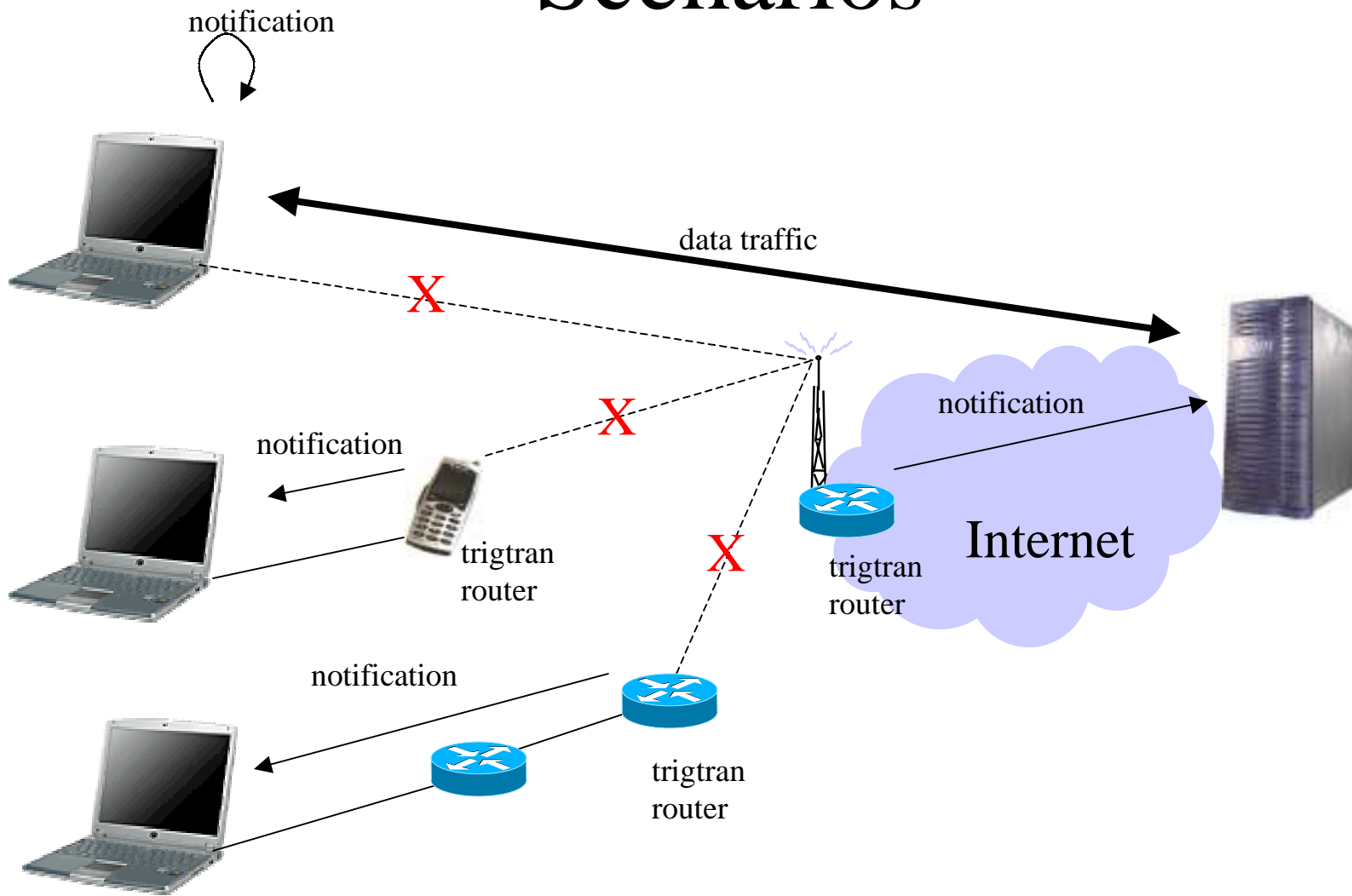# TRIGTRAN Protocol Considerations

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- IETF55-

TRIGTRAN

- Identifying interesting link-layer events
- *Defining a protocol for event notifications*
- Defining usage of notifications by transport layers/applications

Scenarios

notification

data traffic

X

X

notification

trigtran
router

notification

X

trigtran
router
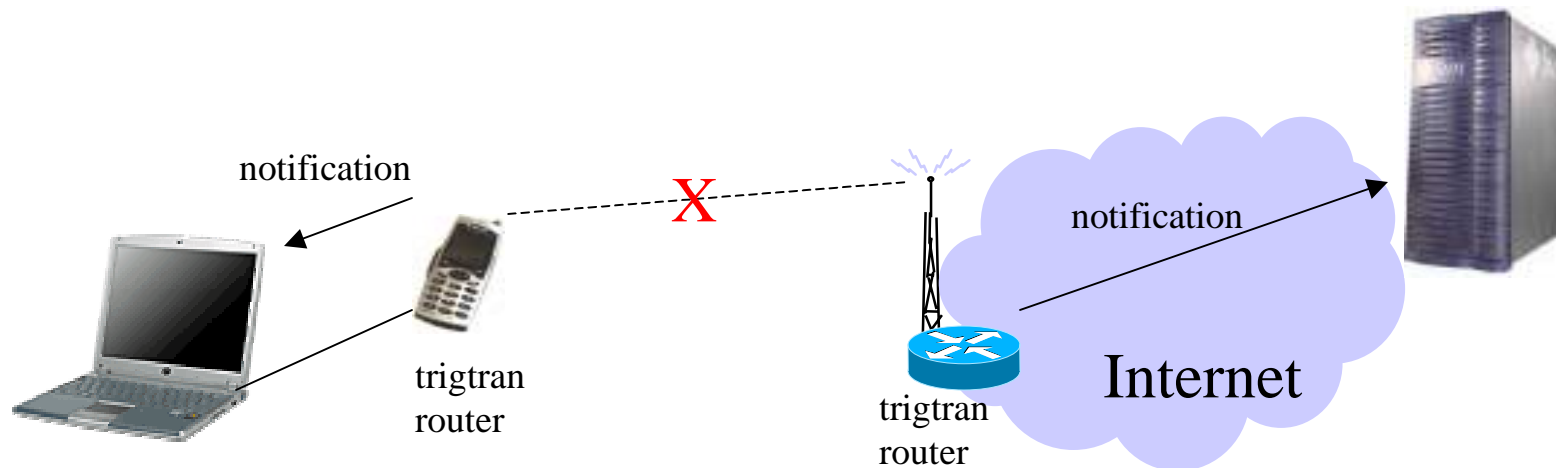
Internet

notification

trigtran
router

Protocol Considerations

- Recipients of notifications
- Discovery of TRIGTRAN router
- Registration, de-registration
- Notification delivery
- Security

Recipients

- Who should receive the notifications?
    - Both ends of a communication, or just one?


    - Only registered hosts, or any host using the router?
    - If any host, then how are they identified?

Discovery

- Scenarios
  - TRIGTRAN router one hop away from host
  - TRIGTRAN router multiple hops away
    - Mobile networks (IETF NEMO WG)
    - Far end of the communication
- Far end just gets notified (no discovery, no registration)

Registration

- TRIGTRAN router registration mechanism
  - Transport
  - Content
    - Selectors (filtering notifications)
    - What if a TRIGTRAN router has several up-link interfaces?
    - What if there are several TRIGTRAN routers?

trigtran
router

X

Internet
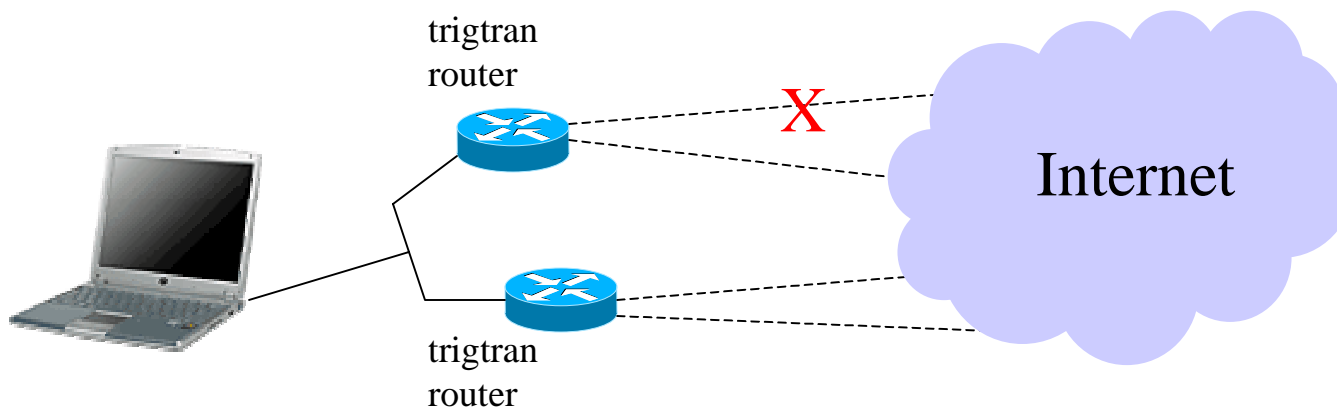
trigtran
router

Notification Delivery

- Transport needed
- Congestion avoidance
  - Many hosts can be effected simultaneously
  - Many TRIGTRAN routers can be effected simultaneously

Security

- Threat analysis needed
  - Spoofing is an issue
- Message integrity
- Authentication
- Replay protection

Location of TRIGTRAN Router

- As it gets further away from host, things get more complicated:
  - Discovery
  - Security
  - How to interpret notifications