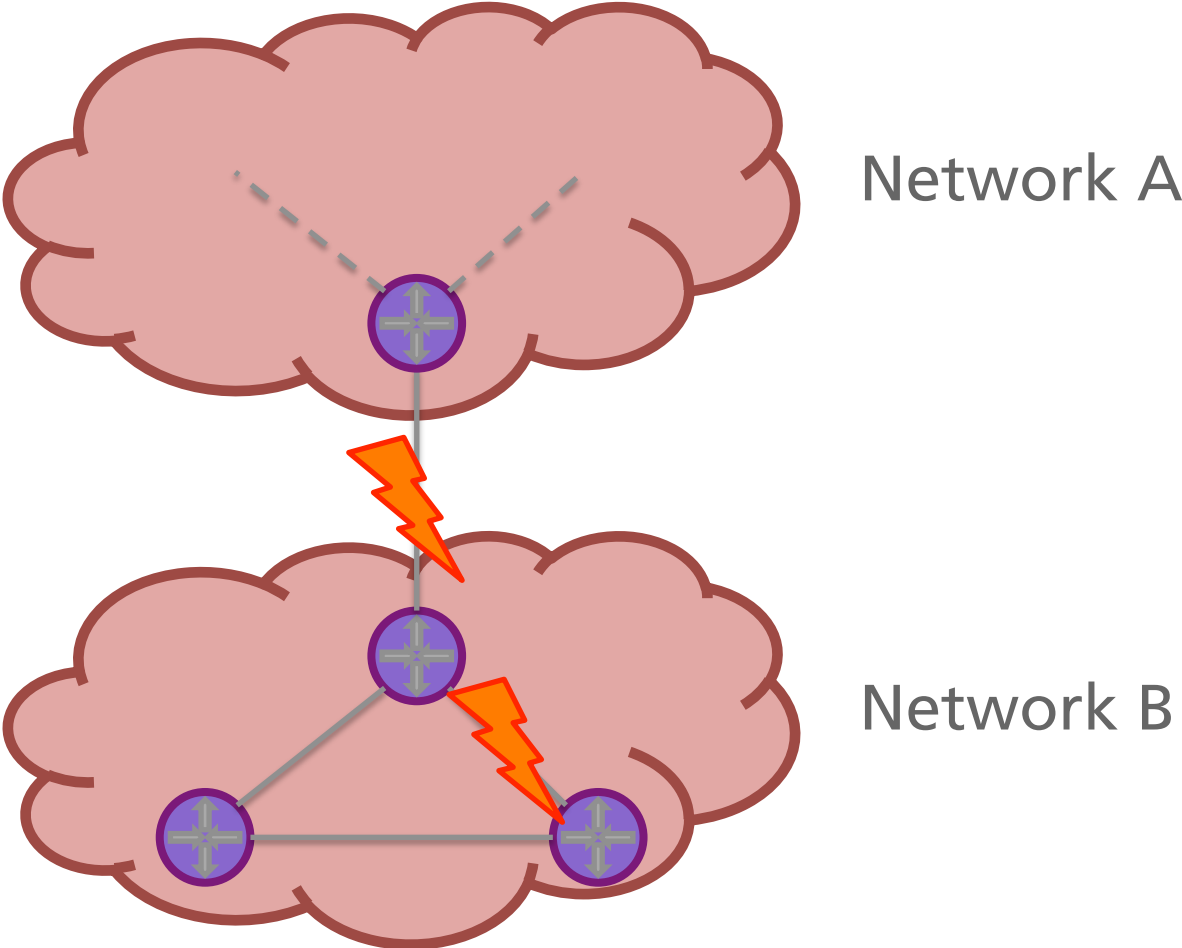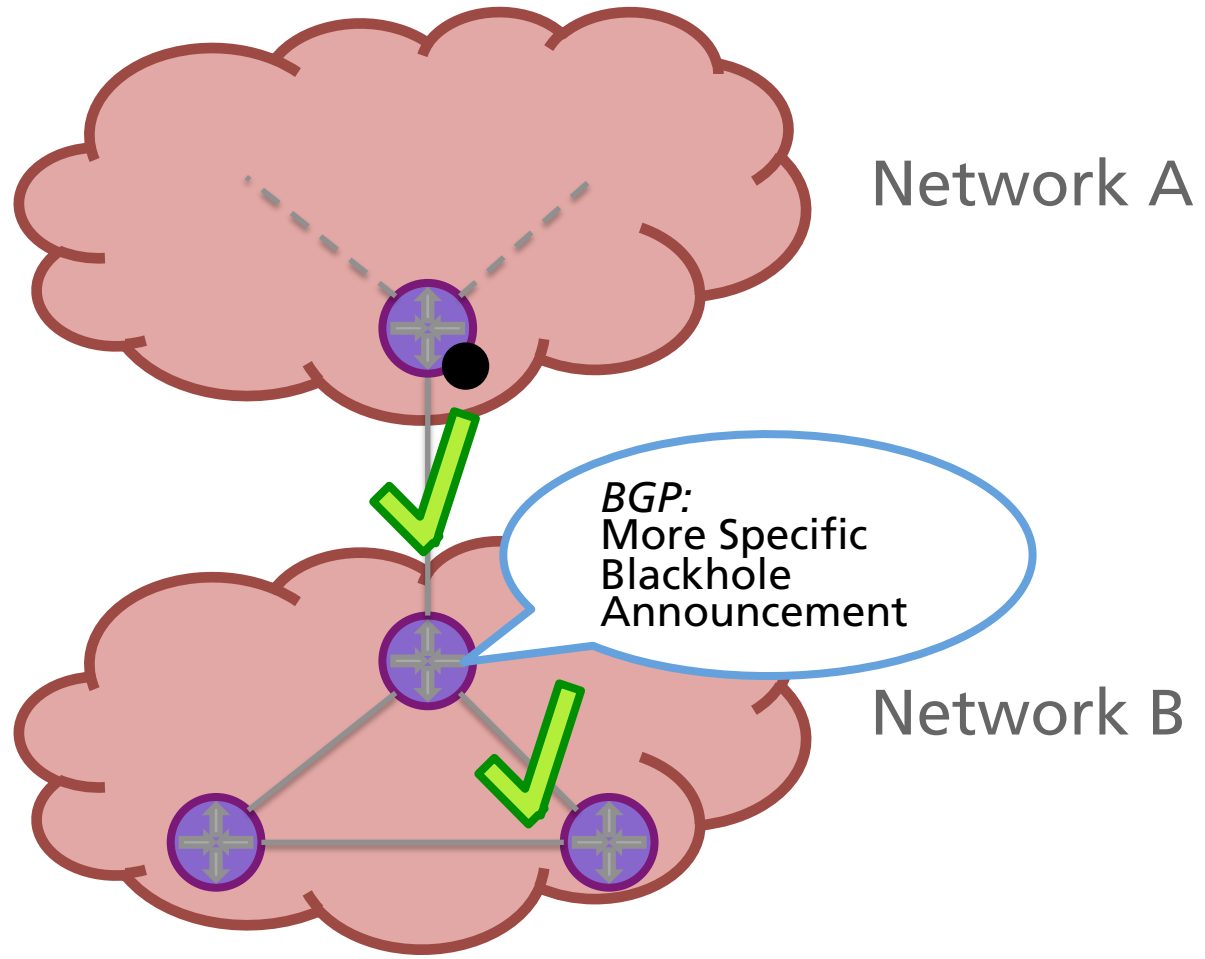# BLACKHOLE BGP Community for Blackholing

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Motivation: The Problem: Massive DDoS

Network A

Network B

Motivation: A Solution: Blackholing

Network A

Network B

BGP:
More Specific
Blackhole
Announcement

Motivation: Different Triggers for Blackholing

- Different triggers for Blackholing at IXPs (selection):
    - DE-CIX Apollon   Blackhole IP Address: FRA: 80.81.193.66, NY: 206.130.10.66
    - Netix   Blackhole Community: 65499:999
    - MSK-IX.ru   Blackhole Community: *0:666*
    - NIX.CZ   Fenix: RTBH
    - TPIX.pl   Blackhole Community: *29535:666*
                Policy control at route servers

- Different triggers for Blackholing at ISPs (selection):
    - Init7:   Blackhole Community: *65000:666*
    - Team Cymru: Blackhole Community: *64496: 666*
    - Hurrican Electric: Blackhole Community: *6939:666*
    - NTT: Blackhole Community: *2914:666*

- Proposal: One commonly agreed way to trigger Blackholing at IXPs and ISPs -> Internet Draft

Evolution

2014:

- Euro-IX tech mailing list: Discussion on commonly agreed Blackhole community
- A solution was selected: Blackhole BGP Community: **65535:666**
- 25th Euro-IX Forum: Presentation and panel about Blackholing
- Work on an "Internet Draft" started

2015:

- Draft of "Internet Draft" discussed on the Euro-IX tech mailing list
- "Internet Draft" Version 00 submitted to IETF GROW working group
- Discussion on the GROW mailing list and during the IETF 93
- Requests from Euro-IX and GROW:
  - Also cover ISPs
  - Be more specific about "Operations Recommendations"
- 27th Euro-IX Forum: Discussion about the updated Internet draft

Current Status

GROW WG:

- Requests from IETF 93 / Euro-IX:

  1. Also cover ISPs and not only IXPs: Job Snijders (NTT) committed himself to contribute which he perfectly did

  2. Add more "Operations Recommendations":
     - Local scope: NO_ADVERTISE / NO_EXPORT
     - Accepting blackholed IP prefix: Length of prefixes, more specific
     - IXPs: Peering at route servers: Policy control, next-hop IP address

- Version 01 of the "Internet Draft" released (above requests applied)

- No unresolved comments/requests I am aware of

- Working group adaption? Done.

Feedback / Comments / Questions

Please provide feedback:

https://tools.ietf.org/html/draft-ymbk-grow-blackholing-01