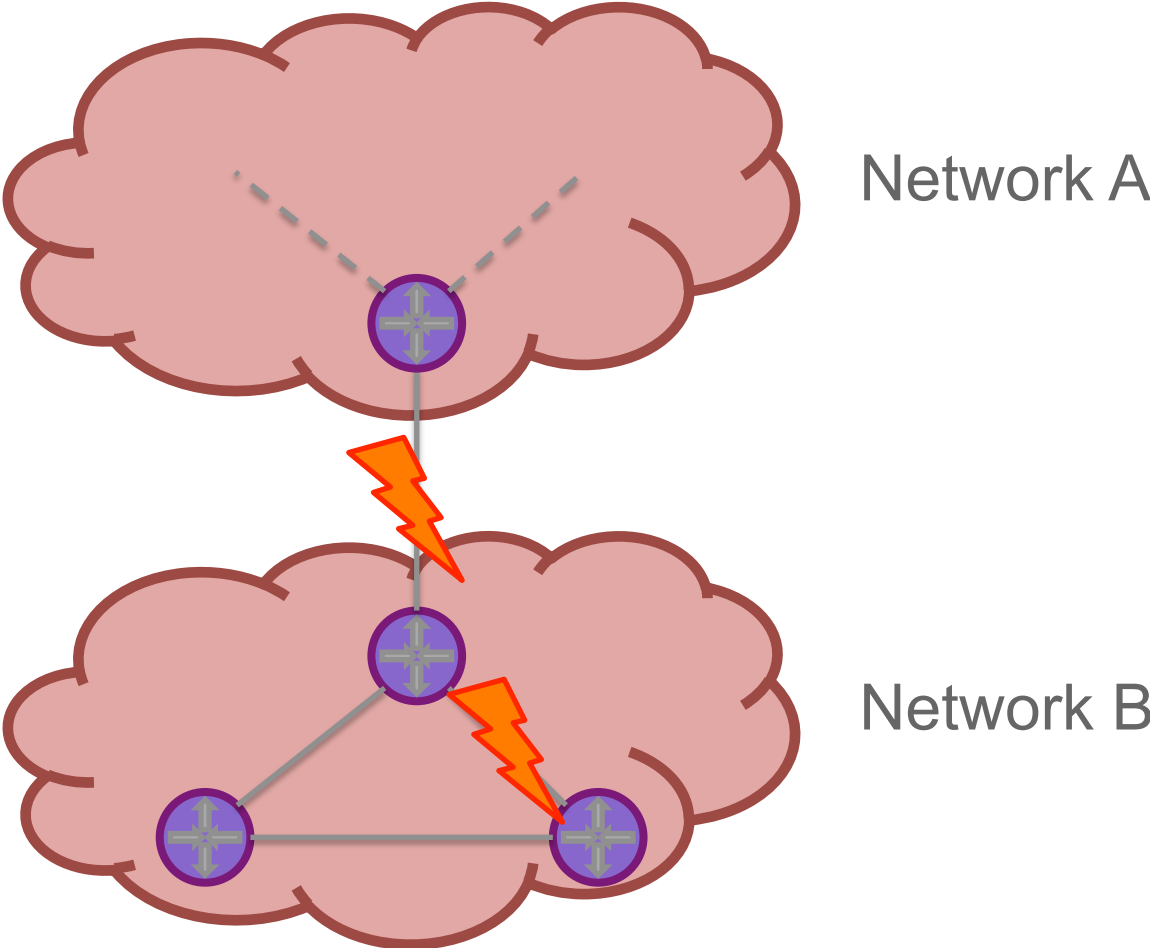


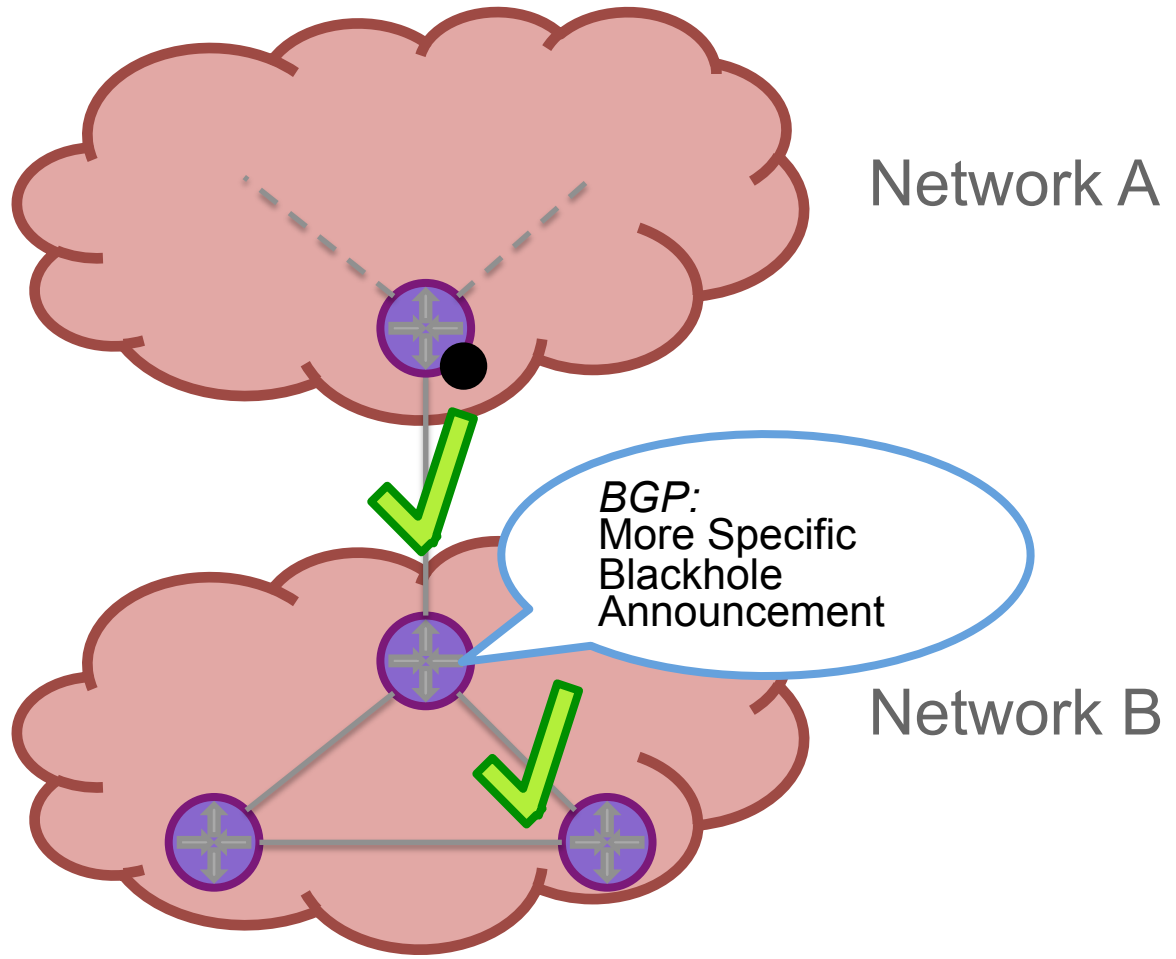
BLACKHOLE BGP Community for Blackholing

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Motivation: The Problem: Massive DDoS



Motivation: A Solution: Blackholing



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
 - Hurrigan 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: Commonly agreed Blackhole community
- 25th Euro-IX Forum: Presentation and panel about Blackholing
- Work on an “Internet Draft” started

2015:

- 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”

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.

Next Steps

- We need more feedback -> Release new versions: Repeat
- Last Call is planned before IETF 94

Feedback / Comments / Questions

Please provide feedback:

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