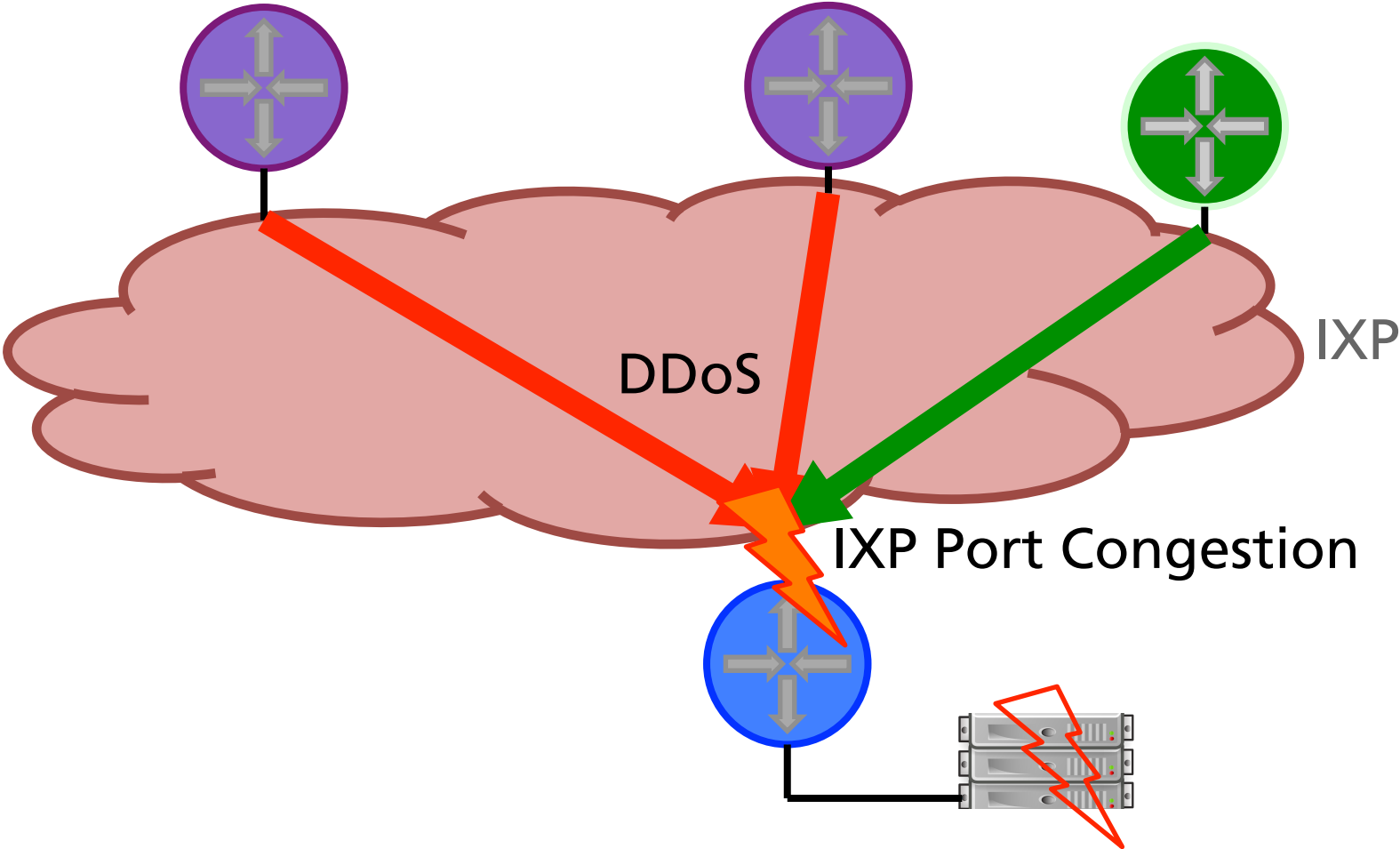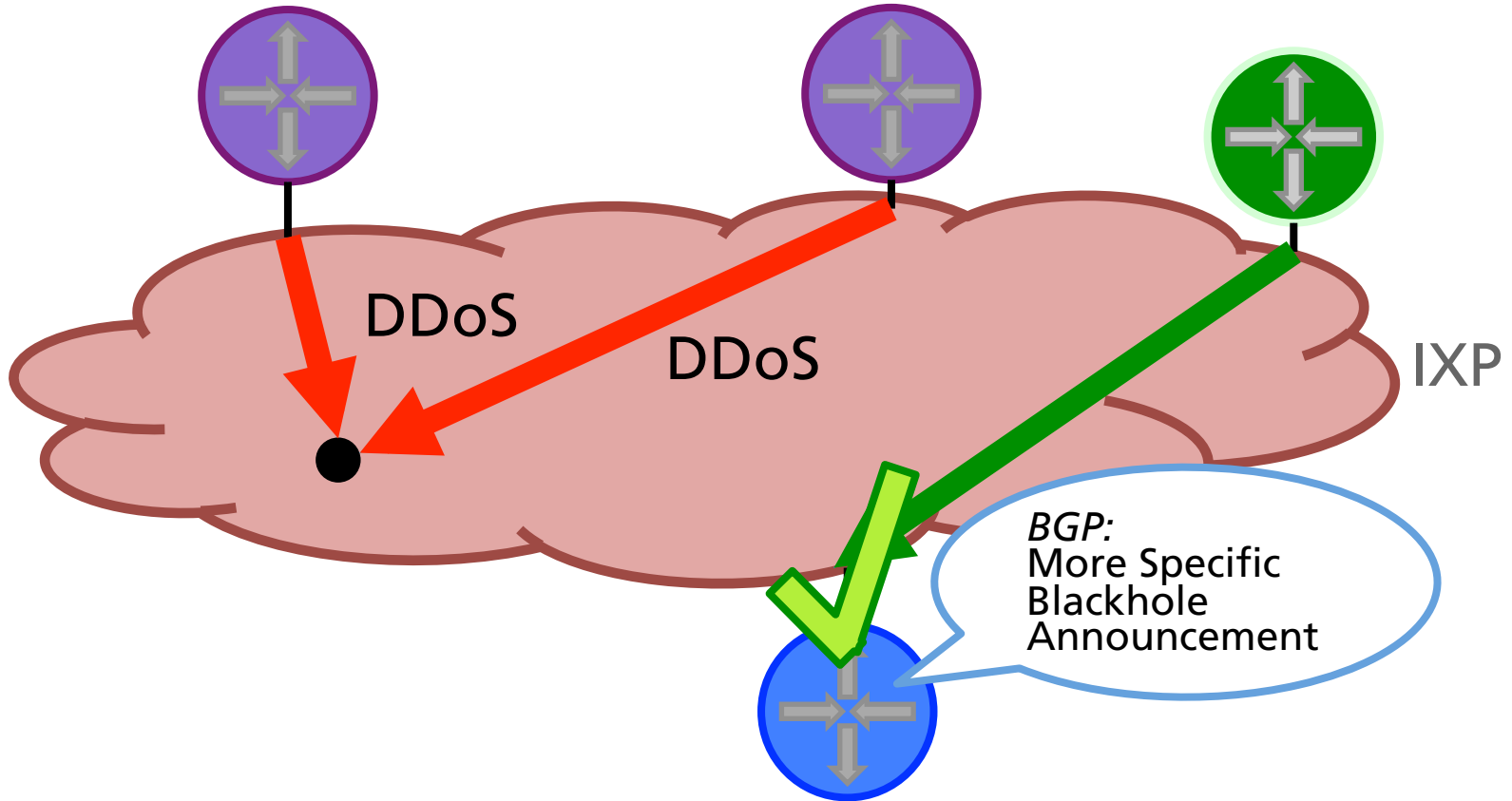# BLACKHOLEIXP BGP Community for Blackholing at IXPs

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Motivation: The Problem: Massive DDoS

DDoS

IXP

IXP Port Congestion

Motivation: A Solution: Blackholing

Motivation: Different Triggers for Blackholing at IXPs

- 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:
    - Block ASN X: 0:X
    - Only ASN X: <IXP-ASN>:X
    - Block all: 0:<IXP-ASN>
    - All ASNs: <IXP-ASN>:<IXP-ASN>

- Proposal: One commonly agreed way to trigger Blackholing -> Internet Draft

Decision Making: Euro-IX Tech-l Mailing List

- 67 mails between 29th July and 5th August 2014
- Discussion on commonly agreed Blackhole community
- Two different concepts: discussed and voted

- All IXPs offering Blackholing voted for:
  65535:666

- Advantages:
  - 65535 is a reserved ASN
  - 65535:666 = 0xFFFF029A is from the well-known BGP community space but unused
  - No conflict with existing triggering concepts (e.g., policy control)
  - Compatible (and can co-exist) to current Blackhole triggering concepts
  - Easy-to-use Blackholing at IXPs

Current Status

GROW WG:

- ~~Submission of Internet Draft~~

- Open discussion:
  1. Job Snijders, Christian Seitz, and others from Euro-IX community requested to extend the BGP community for triggering Blackholes at IXPs and ISPs.
  2. Job Snijders and Jeffrey Haas requested that BGP speakers receiving a Blackhole announcement (trigger for blackholing) MUST add a NO_EXPORT / NO_ADVERTISE (if not present).
  3. Jeffrey Haas requested to only permit the Blackholing behavior if and only if it also contains NO_EXPORT or NO_ADVERTISE.

- Working group adaption?