FCT Fundação para a Ciência e a Tecnologia

Computação Científica Nacional
FCCN

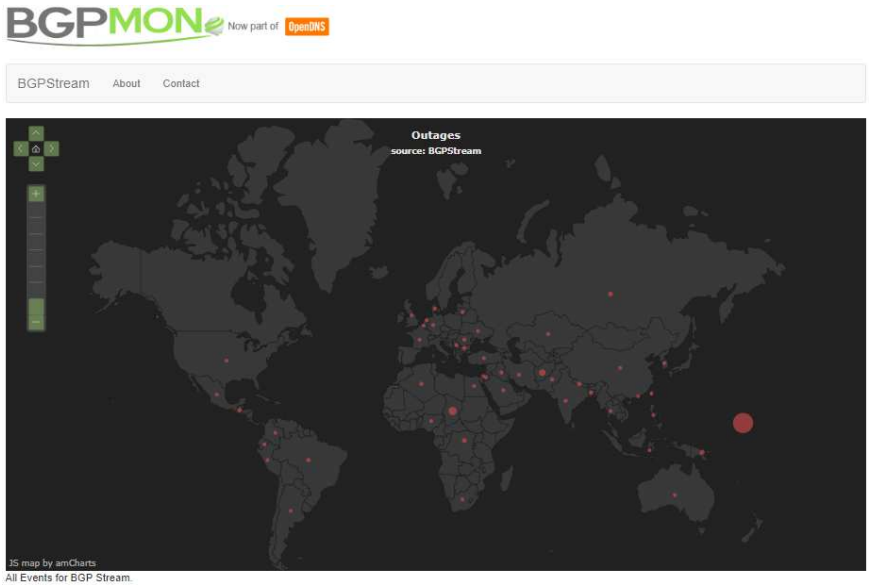
CERT RCTS

The Anti-Hijacking Policy Proposal

Carlos Friaças
RCTS CERT, FCT|FCCN
24th May 2019, TF-CSIRT 57

Hijacks Happen. Everyday.

- bgpstream.com
  - See «possible hijacks»
- Several different goals
  - Traffic interception
  - Diversion for law enforcement/jurisdiction
  - Injecting/sending toxic content without being identified or bothered
  - More…?



Are there any consequences?

- Hardly.
  - Upstreams might cancel service
  - IXPs may kick hijackers out, if they hijack through the IXP

- **NONE, at REGISTRY level.**
  - Hijackers are able to maintain service agreements and allowed to be part of the registry ecosystem
  - Hijackers keep their legitimately obtained numbering resources -- which they use in hijacks

Who Manages Numbering Resources? Who makes the rules?

- **Regional Internet Registries do**.

- You might have heard about the RIPE NCC…

- Is the RIPE NCC making the policies that allow the «hijacking party to go on»?
  - NO
  - **The «RIPE community» builds policies – i.e. «me», «you», «us».**

The Policy Development Process…

- https://www.ripe.net/participate/policies

What are we proposing?

- Persistent Intentional Hijacks are to be declared a RIR policy violation
- Hijacks are not tolerated
  - Mistakes are out of scope
- If more than one policy violation occurs, RIR membership may be lost
  - RIR Service Contract terminated
    - Numbering resources revoked
  - Only after the company involved had the chance to object and explain there is a misunderstanding
    - «Checks & Balances»

The main hurdle…

<any org here> is not the Routing Police.

- It is a design feature that no entity alone can supervise routing.
- But how this justifies nothing can be done, when org X is announcing address space from org Y, without their approval.
  - …and anyone can see it!

Arguments Opposing 2019-03

- The registry is like a «land registration office»
  - RIRs are membership-based; RIRs distribute assets.
- The registry doesn't have anything to do with routing
  - So why is a registry needed?
- This policy, if accepted, could be weaponised
  - There is a number of safety knobs; several experts will look at each case.
- There are huge legal risks to the registry itself
  - Closure of membership is already established; that can happen only if members don't follow established registry rules/policies.

Arguments Supporting 2019-03

- The gap in the policies needs to be closed
  - Consequences for hijackers are needed in order to reduce this «technique»
- There are several sources with abundant routing information
  - Which can be used to determine if an hijack took place and if it was intentional
- Tools like RPKI and MANRS are not enough
  - For the time being, given their limited adoption

RIPE NCC
RIPEstat

Important detail to have in mind…

- Who are the victims of an hijack?

1) The legitimate number resource holder

2) Anyone who receives an hijacked route announcement
   - i.e. potentially *everyone*

Fresh News about RIPE NCC members' closures…

- Stats published last week

Closures for Provision of Untruthful/Misleading Information

Year	Closures	By Country
2014	3	1 PL, 1 IR, 1 UA
2015	1	1 RU
2016	5	3 IR, 1 GR, 1 DM
2017	1	1 UK
2018	52	37 SC, 4 US, 3 UK, 3 HL, 2 CN, 2 RU, 1 AU
2019	7	4 RU, 1 HK, 1 KZ, 1 NL
Total	69	

How to participate?

- Subscribe to the Anti-Abuse Working Group Mailing List
  - https://www.ripe.net/mailman/listinfo/anti-abuse-wg/

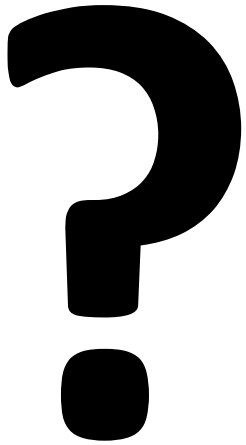
- Do express your opinion on the list
  - «I support 2019-03»
  - Write «why», if you can spare the time

- You can obviously instead oppose 2019-03
  - Saying «why»
  - Or saying where the proposal can be improved (in further versions)

Policy-wise: A Global Effort

- RIPE: **2019-03**
- LACNIC: **LAC-2019-05**
- ARIN: **PROP-266**
- AFRINIC: <queued>
- APNIC: <queued>

Questions



https://anti-hijacking-proposal.tk

(text, mailing list archives and subscrition links)

THANKS!
DANKE!
MERCI!
OBRIGADO!

CERT RCTS