## RPKI Routing BoF

2012.8.29(wed) 18:00-19:00, Meeting Room 3

### Today's Agenda

- 1. Introduction to this BoF, Taiji Kimura
- 2. Brief experience report from Japan, Tomoya Yoshida, INTERNET MULTIFEED
- 3. RPKI Service Promotion, Di Ma, CNNIC
- 4. Technical and Operational issues and overcoming them, Randy Bush, IIJ
- 5. How APNIC accommodates NIRs' Resource CA, George Michaelson, APNIC
- 6. QA, summary and next step



### Introduction to this BoF

Taiji Kimura



### Why this BoF is planned (1)

- Two things I surprised recently
  - RPKI-ware BGP routers seem to work and getting compatible each other
  - Decision and discussions in RIPE community
    - will be shown later



#### Why this BoF is planned (2)

- My motivation for this BoF
  - Have an opportunity to share topics on RPKI to talk each other
    - router operators, LIR, NIR, RIR etc..



### **BoF Goal (on the BoF page)**

- Share experiences taken in Japan on RPKIaware routers and RPKI tools
- Share status and discussions in the RIPE community for our appropriate deployment
- Create an opportunity to discuss RPKI deployment between LIRs and NIRs in the Asia Pacific region



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#### Two topics

- RPKI-aware routers are tested in Japan
  - Presentations in 30th JANOG meeting (4 6, Jul)
    - http://www.janog.gr.jp/meeting/janog30/program/rpk. html
  - Tomoya-san has detail.
- RIPE community discussed and RIPE NCC decided to continue working on RPKI
  - Presentation in 64th RIPE meeting (16-20, Apr)
    - https://ripe64.ripe.net/programme/meetingplan/plenary/#tues2



### Impressive works in RIPE community (1)

#### RIPE NCC

- RPKI Tutorial in RIPE 64
- Rich materials useful to try and discuss
  - http://www.ripe.net/lir-services/resourcemanagement/certification/tools-and-resources
    - RIPE NCC RPKI Validator
    - RIPE NCC Hosted Resource Certification (RPKI) Service
    - RPKI test router



### Impressive works in RIPE community (2)

- RIPE community
  - Three concerns raised (we will have the same concern)
    - 1. Operator Autonomy
      - RIR could be forced to tamper with the certificate tree (court order)
    - 2. Security
      - The system could get compromised (hack, error, etc.)
    - 3. Resilience
      - The system could suffer from a failure
      - Data cannot be maintained or retrieved (affecting BGP)
  - Vote in RIPE63
    - "The RIPE NCC will continue working on RPKI"
      - Offer resource certificates on an opt-in basis
      - Offer a platform for BGP Origin Validation



#### A message as the BoF moderator

- Some BGP routers are getting RPKI-aware
- 5 RIR provides Resource Certificates for their members

- Let's look at RPKI and share what we know and what we think between us.
  - How do we deploy it appropriately in AP region?



# QA and the next step

Taiji Kimura



### **QA**

- For each presentation
  - No discussions basically (because of time)

- Questions for next step
  - How was this BoF for you?
    - Was it interesting?
    - What do you want next?
  - Do you think trying RPKI (together)?



## Thank you for coming!

RPKI routing BoF in APNIC34

