



RPKI Service Promotion

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- Current Development of RPKI
- RPKI Operation Issues
- Considerations on RPKI Services

- Fundamental techniques that Running RPKI needs are just over there.
 - IETF Works (RFC6480~RFC6493)
 - RRC6480 An Infrastructure to Support Secure Internet Routing
 - RFC6481 A Profile for Resource Certificate Repository Structure
 - RFC6482 A Profile for Route Origin Authorizations (ROAs)
 - RFC6483 Validation of Route Origination Using the RPKI and ROAs
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 - Community' s Efforts
 - APNIC Resource Certification service
 - BBN Relying Party software
 - Cisco router IOS for route origin validation
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- The next and necessary work on RPKI should correspond to the real world.
 - Resource Transfer
 - Grandparenting Operation
 - BGPSEC Development
 - **Promotion among ISPs !**

- Some operation issues need to be tackled well.
 - Repository
 - Some repositories have poor reliability records.
 - Relying Party software
 - Rsync is not completely competent , an alternative protocol is desirable in the long-term.

- Landing RPKI is far from an easy task.
 - ISPs' security concerns
 - RPKI is secure enough?
 - My route will be under RIR's control?
 - ISP is not proactive.
 - Cost VS Profit
 - RPKI-based inter-domain routing operation polices should be considered prudently.
 - "Towards Detecting BGP Route Hijacking using the RPKI" as in SIGCOMM 2012 Poster Session

- CNNIC, as a NIR, is to get involved in RPKI.
 - NIRs fall into the category of RPKI .
 - CNNIC has been endeavoring to make RPKI well-known in China.
 - Research Project Application
 - Seminar

- CNNIC is considering about providing RPKI service.
 - Certification Authority Service
 - IP address and ASN allocation and certification
 - Authorative data of INR distribution
 - Relying Party Service
 - Small ISPs do not have to operate their own RP, because there have been a set of trusted third parties that offer RP service in the remote cloud
 - CNNIC is competent in playing a trusted third-party RP in China.
 - Public DNS recursive resolution service has been provided by CNNIC.



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