

RPKI Standardization in China

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Standardization Task Force in China

- CCSA
 - China Communications Standards Association
- CCSA Technical Committee 1 (TC1)
 - IP & Multimedia Communication
 - WG1: IP Network Protocol System and Device
 - Basic RPKI technical requirements
- CCSA Technical Committee 8 (TC8)
 - Network & Information Security
 - WG1: Wired Network Security
 - Mechanisms to support secure RPKI operations

RPKI Literacy

- RPKI is still a fresh concept to the majority of China Internet community.
- ZDNS RPKI team began to draft a technical report on RPKI commissioned by CCSA in 2013.
 - Request for feedback via CCSA meetings through two years
 - Approved by CCSA community and ready for publication
 - Content by sections
 - RPKI Background
 - Technical elements
 - Operation mechanisms
 - Operational risks and safeguard
 - Hardware and software as of September 2014
 - World wide deployment as of January 2015

RPKI standardization

- Basic RPKI technical requirements
 - Participants: CNNIC, CAICT, ZDNS
 - Accepting related IETF SIDR documents for Repository Structure, Profile for RPKI Signed Objects, RTR and so on
 - Protocol for RPKI objects synchronization has not been decided yet.
 - Delta is in progress.
 - ZDNS is working on an optimized Rsync based on Ordered Hash Tree, taking RPKI objects characteristics into account.

RPKI standardization

- Mechanisms to support secure RPKI operations
 - Participants: ZDNS, China Unicom, ZTE
 - Focusing on RPKI Fail-over, LTA management, INR transfer and so on
 - Following the track of related SIDR work
 - Getting off the ground with China Inter-networking condition survey and technical descriptions of RPKI operation risks

Focal Points Going Forward

- China Internet community is intrigued by RPKI, of interest of RPKI, but has concerns.
 - “Basic RPKI technical requirements” enable people to use RPKI.
 - “Mechanisms to support secure RPKI operations” makes people willing to use RPKI.
- Concerns should be expressed in technical language and addressed by technical measures

Thanks