ROA Issues for Consideration

Secure Inter-Domain Routing WG (SIDR) IETF 67, San Diego November 2006 Sandra Murphy, Sparta

ROA Issues

- Communication/Distribution
- Authorization Model

Communication/Distribution

- How to communicate the ROAs
- Possible designs
 - Download periodically from single repository
 - Single point of failure; absolute power corrupts, etc.
 - Download periodically from a distributed system of repositories
 - Compatible with resource cert draft
 - Distribute in-line in BGP
 - Because you don't like global exposure of info
 - For disaster recovery
 - We don't need to pick just one!
 - But choice effects design of ROA

Authorization Model

- Presentations have suggested that the ROA is authorized by the prefix holder (only)
- RPSS (RFC 2725), used in RIPE, uses a different authorization model
 - Both prefix holder and AS holder must authorize the ROA
- Suggested by Owen De Long
 - Doesn't want bad guy to announce in ROA that his AS may originate prefix, announce AS_PATH with that origin (and itself in path), do bad things, then his NOC gets the calls.
- Q: stick with prefix only? Go with RPSS/RIPE?