Transfer in the RPKI
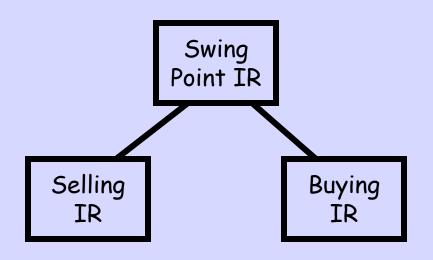## draft-ymbk-sidrops-transfer

SIDROps WG

2019.11.20

randy@psg.com, sra@hactrn.net, gih@apnic.net, ggm@apnic.net
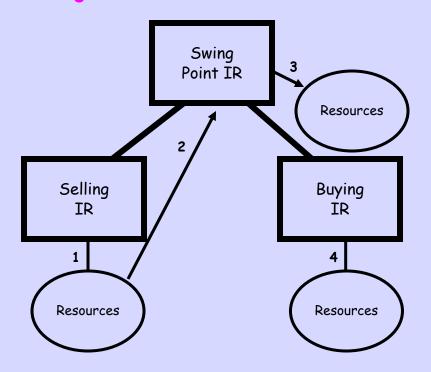
We Can Do This

Transfer, within the RPKI, of actual address space and/or autonomous system number resources between two Internet Registries (ISPs, RIRs, NIRs, etc.) is reasonably achievable for most useful operational needs

Swing Point

The *Swing Point* is the IR at the lowest point in the RPKI hierarchy which the seller and buyer have as a common parent and which has agreed to be used as the agent of transfer
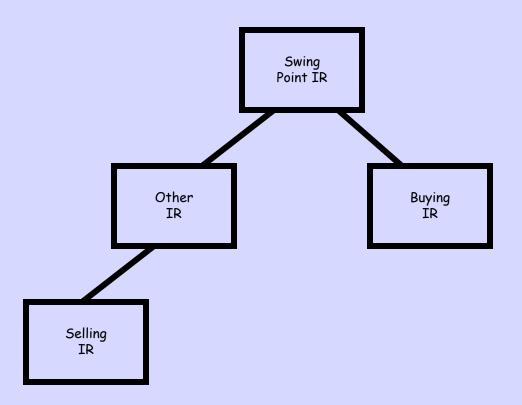
Simple Transfer

1 – Seller Separates Resource(s) to be Transferred
2 – Tells Swing Point
3 – Swing Point may Separate Resource(s)
4 – Swing Point Delegates to Buyer
5 – Swing Point Withdraws from Seller when Agreed
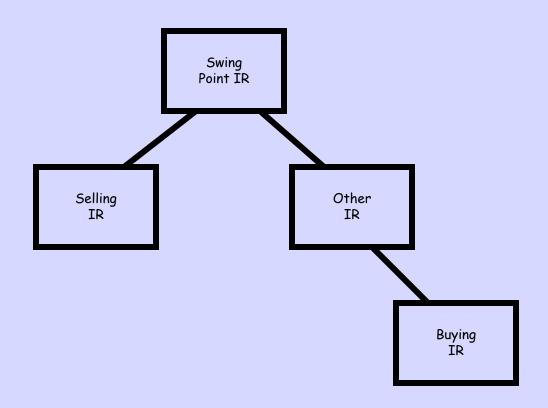
"Torn Euro" Protocol

- How does the swing point know that seller and buyer have 'settled?'

- Remember

  4 – Swing Point Delegates to Buyer

  5 – Swing Point Withdraws from Seller when Agreed

- When the swing point receives both halves of a torn Euro bill

- Steve Kent was going to write the protocol
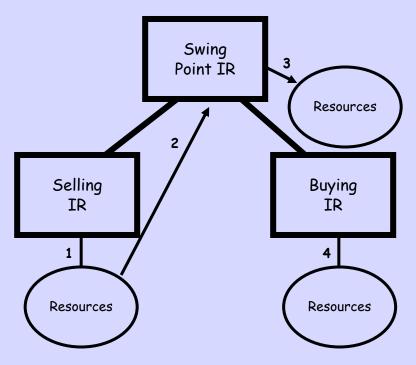
Seller Indirect of Swing Point

For the details, read our paper ☺

Buyer Indirect of Swing Point

For the details, read our paper ☺

There is a Problem

1 – Seller Separates Resource(s) to be Transferred
2 – Tells Swing Point
3 – Swing Point may Separate Resource(s)
4 – Swing Point Delegates to Buyer
5 – Swing Point Withdraws from Seller when Agreed

RIRs' 'Stats' Files Preclude 4

The RPKI Can Do It

Multiple IRs may have Certs and ROAs for the same resource(s)

The RIRs have a problem Their 'Stats File' allows only one entry per resource

This Precludes Make Before Break

Break Before Make is NOT Operationally Viable

Where and How Do We Go From Here?

- Both with the Transfer document

- And helping the RIRs to become unstuck from the only-one-LIR-per-resource problem