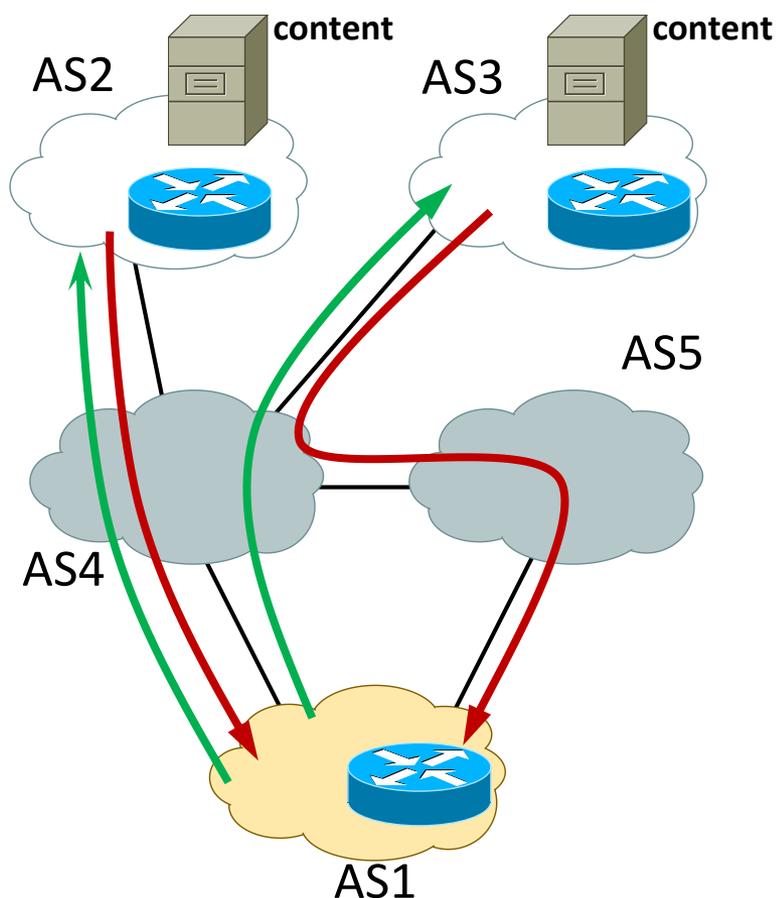# Inter-ALTO
A second attempt?
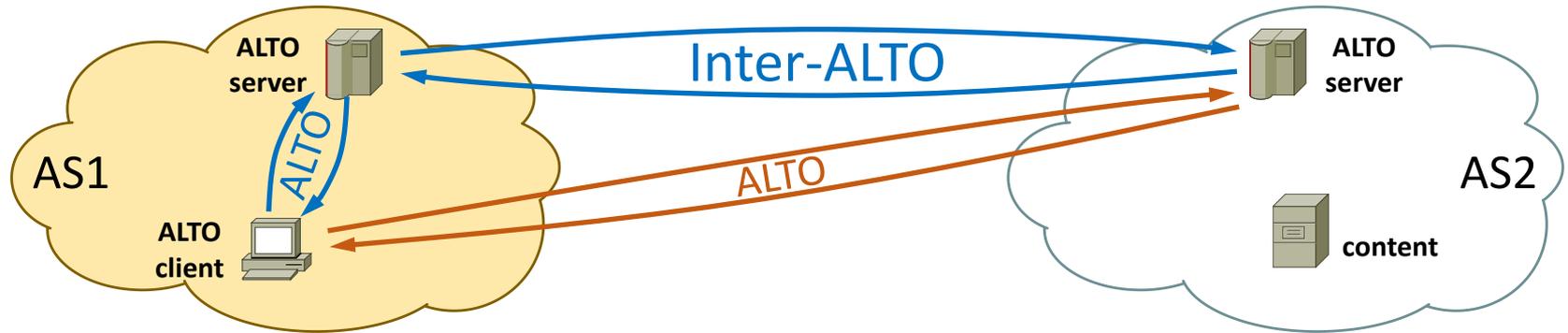
Piotr Wydrych <piotr.wydrych@agh.edu.pl>

Motivation: Route Asymmetry

- Local topology information source knows only uplink path
- If AS1's cost maps are built based on as-hops, endpoints in AS2 & AS3 are equal
- To take bidi traffic into account, downlink path has to be known
  - or at least – ingress link + № of AS hops

What's the Difference?

- Pure ALTO – client receives effect of applying AS2's policies to AS2's routing information

- Inter-ALTO – client receives effect of applying AS1's policies to AS1's and AS2's merged routing information

Motivation: Remote ISP's Pref.

subnet with bad access conditions or high traffic costs

Remote AS

} all within one PID
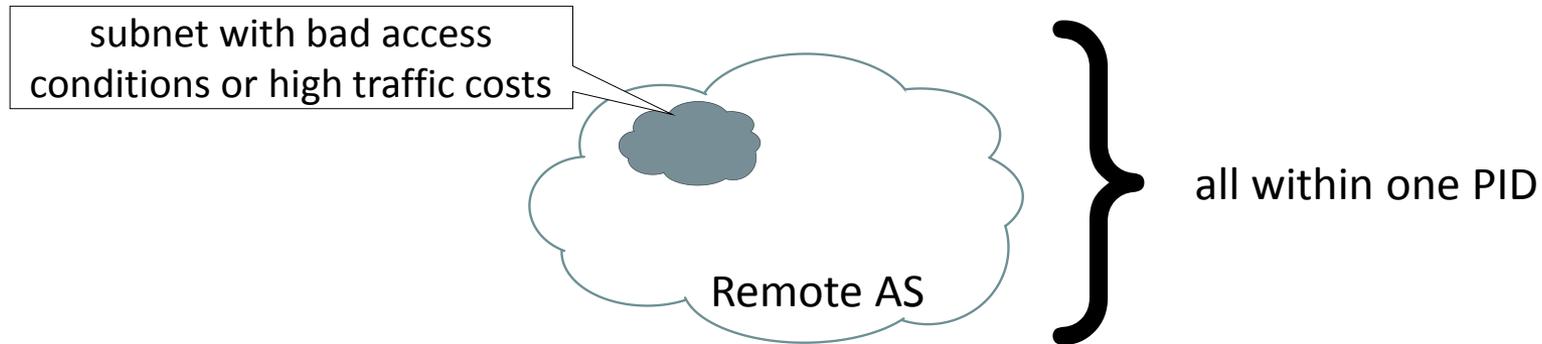
- Local topology information source cannot differentiate Remote AS's subnets

- Network and cost maps built with inter-ALTO may reflect fact that not all endpoints within ISP are equal

Next steps

- Use-case determination
  - [I-D.dulinski-alto-inter-problem-statement-01]
  - Partitioned networks
- Requirements
  - Mandatory information being exchanged
  - Authentication, authorization, confidentiality
  - Incremental updates
- Don't reinvent the wheel
  - Reuse protocols & formats that ALTO servers speak