

# Request-URI Param Delivery

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# What are our Requirements?

- Delivery of full URI – including params - of most recent target, to the UAS
  - GRUU params [original problem]
  - Unknown Aliases
  - Unknown GRUU
  - Limited Use Addresses
  - Sub-Addressing
  - Service URI
  - **Freephone (?)**
- Non-Problems
  - Who inserted info
  - Proxy to UA communication

# Solutions on the Table

- Draft-rosenberg-sip-ua-loose-route
  - Attempts to re-architect SIP model to separate retargeting from re-routing
- Draft-holmberg-sip-target-uri-delivery
  - New SIP header inserted by home proxy to capture pre-translated target URI
- History-Info (RFC4244)
  - Provides this information but not clear how to extract current target URI
- P-Called-Party-ID (RFC3455)
  - Used by 3gpp, similar but some other uses

# Current Status of Debate

- Folks worried that UA loose route is too major a change to make at this time
- General agreement not to use P-Called-ID since its already 'owned' by 3gpp
- H-I supported by some, those folks agree extensions are needed to indicate target
- Others prefer new Target header as being 'super simple' – HI too complex
- Some worries about tel URI

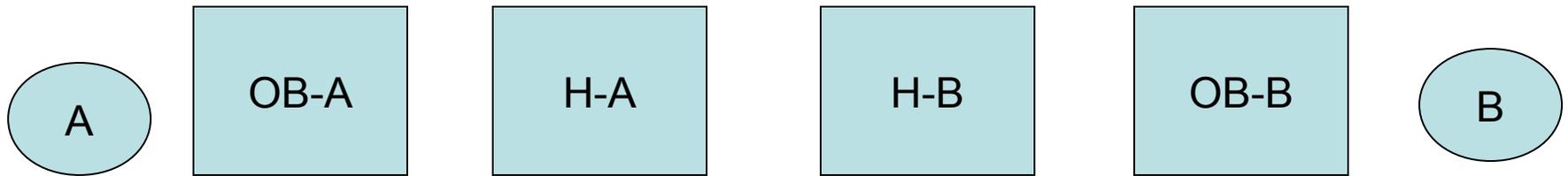
# Proposal

- Don't do UA loose route – just too late (sigh)
- Use History-Info, **HOWEVER**
  - Document an “application” which minimizes what a proxy and UA need to implement substantially – indeed makes it similar to Christer's proposal in terms of work
  - Defines an extension to HI to indicate target
  - Mandate usage of this mechanism in the GRUU spec

# Mechanism Proposal

- Define a 'target' HI-param (not URI-param)
  - Indicates that this URI is known to be a request target
- Minimal proxy algorithm
  - Home proxy only
  - If a request comes without HI, then
    - Add to HI entries – first with original RURI, including 'target' param, second with translated RURI, index=1 and 1.1 respectively
  - If a request comes with HI, then, based on policy
    - Remove and do above OR
    - Append, but check if bottom-most entry is already RURI
- Minimal UA algorithm
  - Traverse backwards until you find HI value with target param, and use that

# Example



INVITE sip:B@example.com  
→

INVITE sip:B@example.com  
→

INVITE sip:B@example.com  
→

INVITE sip:B@example.com  
HI: <sip:B@example.com>index=1;target,  
<sip:B@1.2.3.4>;index=1.1

→

# Properties

- UA algorithm works with full HI implementation also
- Home proxy can instead do full HI and it still works
- Mechanism is a valid usage of HI – just defines specific policies
- Solves our specific problem – but not freephone case (usually not reg lookup)
- Backwards compatible