

ALTO Information Redistribution

draft-gu-alto-redistribution-02

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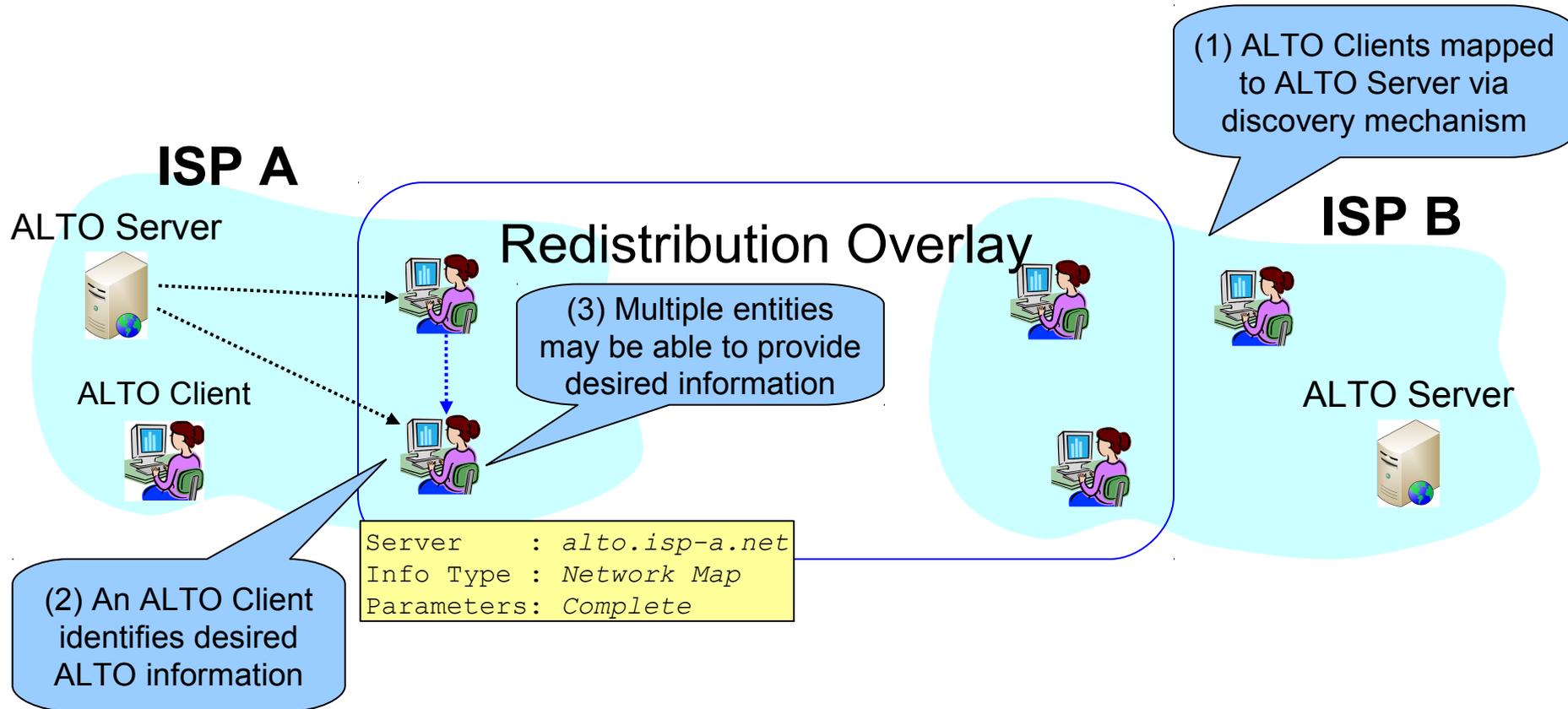
Outline

- Quick recap of draft
- Modifications since -01
- Discussion

ALTO Service Scalability

- Multiple methods to increase scalability are possible
 - Load balancing (deploy additional ALTO Servers)
 - Caching (use existing or deploy new web caches)
- Another technique: **Utilize P2P paradigm**
 - ALTO Clients may redistribute ALTO Information

Redistribution Process



Framework: Basic Requirements

- *ALTO Clients identify desired ALTO information*
 - Application-dependent
- *Transfer ALTO Information amongst ALTO Clients*
 - Application-dependent
- *Verify ALTO Information once received*
 - ALTO Clients might not be trusted

Framework: Information Types

- ALTO Information is dependent on
 - ALTO Server, Type, Input Parameters
- *Reusable ALTO Information*
 - ALTO Information desired by multiple ALTO Clients
 - Redistributing *reusable* info can reduce ALTO Server load
- Examples (w.r.t. `draft-ietf-alto-protocol-03`)
 - Reusable
 - Server Capability, Full Network Map, Full Cost Map
 - Non-reusable
 - Endpoint Cost Service queries

Framework: App Design Space

- Which ALTO Clients query the ALTO Server?
- How is redistributed information located?
- What is the naming scheme for redistributed information?
- What is the protocol for retrieving redistributed information?
- What is the encoding for redistributed information?

Redistribution Techniques

- Techniques for particular points of the design space
- Currently included in draft
 - Tracker-based
 - ALTO info retrieved by tracker and distributed to clients
 - Published to tracker by peer
 - Trackerless
 - Use DHT to find peer with ALTO Info

Modifications since -01

- Intended status changed to BCP
 - State principles behind ALTO Info Redistribution
 - Discuss design space and considerations for applications
 - Present widely-applicable techniques for enabling redistribution in applications
- Section 4: ALTO Protocol Requirements
 - Re-purposed to state relationship with mechanisms in protocol draft
- Section 6: Discussion on Updating (removed)
 - Now present in protocol draft
- Section 7: Security Considerations (removed)
 - Now present in protocol draft

Discussion

- Recommendations to ALTO Service providers
 - e.g., when should redistribution be applied?
 - Is this the right document?
- Updating redistributed information before expiration
 - Is it needed?
 - If so, should draft provide recommendations?
- Additional redistribution techniques
 - e.g., for mobile networks?