MIMI Transport Protocol (MTP)

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Strawman Decisions in this Draft

- Single provider owns the group chat
- Server-to-Server only
- Messages pulled from guest provider
- Sync on a per group chat basis
- Sync uses long poll (no one loves this)
- Properties vs. Messages
- OOB Connection Authorization for anti-spam

Properties vs. Messages

Property

Something for which the only thing that matters, is its current value.

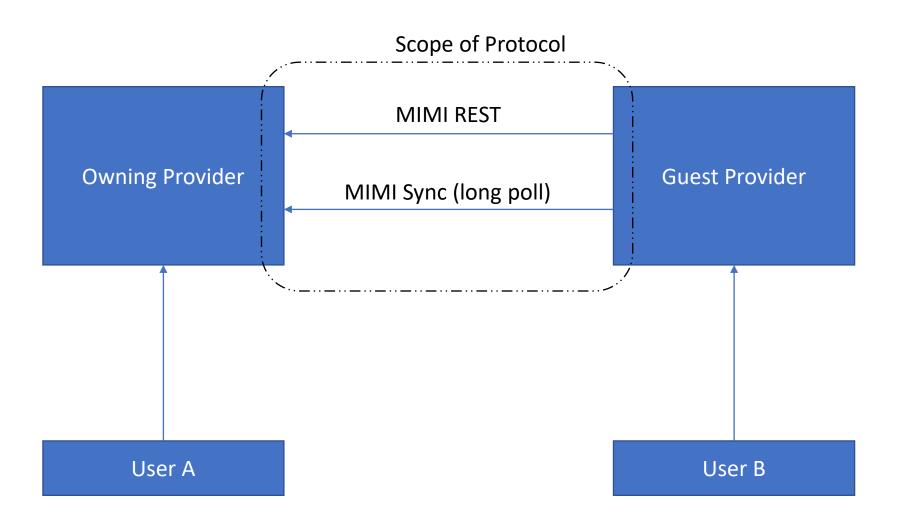
- Group Name
- Topic
- isModerated
- isReadOnly

Messages

Content shared in the group, where I will want to see them in time order.

This is the "stuff" in the content draft

- Text
- Reaction
- Link
- Image



Out of Band Comms (SMS, Email, etc)

Owning Provider

Guest Provider

1

Guest provider learns of new group chat that its user is in. In current I-D is via OOB technique, others can be added.

Guest provider maintains list of foreign groups a user is in.

User A

Owning Provider

Guest provider uses
REST API to fetch
properties. Does this to
establish initial/current
view on properties for
the group.

Guest Provider

Guest Provider

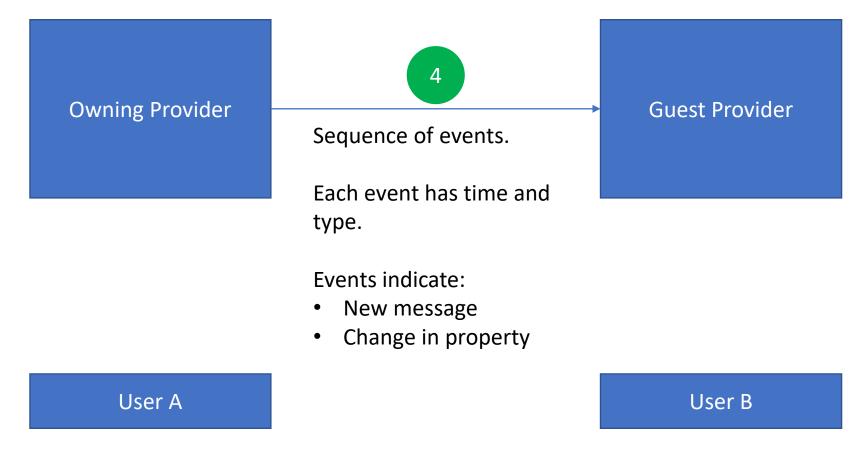
User A

Owning Provider

Guest provider
subscribes to changes by asking for all events from current time onwards.

Guest Provider

User A



MTP Sync Model: Recovery

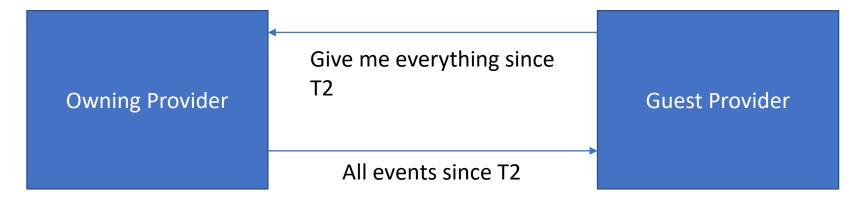
Owning Provider

Gues Provider

Last event: T2

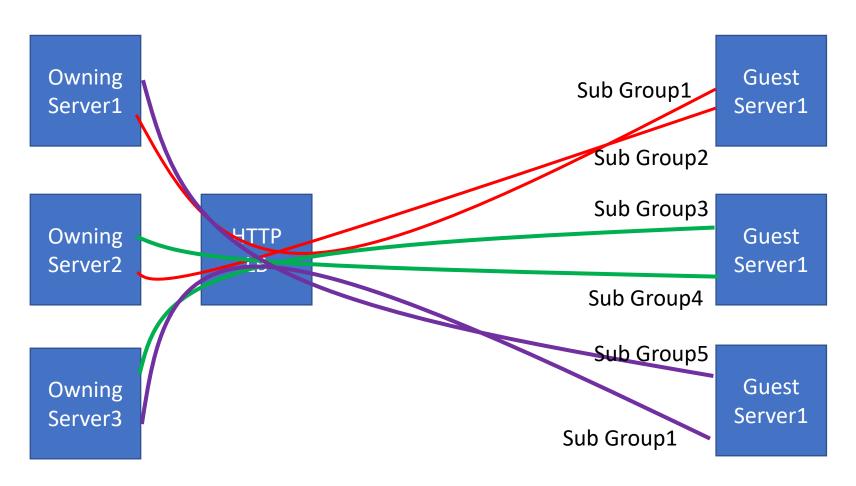
User A

MTP Sync Model: Recovery



User A

MTP Cloud Scale Model



Subscriber side sharded across servers by subscription ID

No problem if multiple subscriptions for same group – de-duped via message ID uniqueness

Subscribed side load balanced using existing HTTP LB

Fine grained subscriptions enable easy distribution of work

Subscription state bound to connection state – eliminates need for subscription DB