

VARs - Strawman Proposal 2

Proposed Changes:

- use nats.io as proposed in Strawman proposal 1
- Create a ship service that relays annotation CRUD events to another nats.io service that is on shore and outside MBARI's firewall. The shore nats.io sends a message to the VARs Shore service which updates the remote app via rest
- The shore service in-turn receives CRUD events from the remote annotation web app and, due to it's firewall privileges, sends the CRUD event to the ship-based nats.io where it is propagated to the ship service. The ship service then calls annosaurus to act on the CRUD event.

Pros:

- Allows multiple annotators from both ship and shore.
- Allow annotations from outside the firewall.
- Web application. No installation required
- Can handle transient connection.

Cons:

- Shore annotators can not frame grab
- Introduces lag, (lag not yet characterized)
- Requires development of multiple applications and protocols. (Expensive/Requires lots of engineering time.
- In addition to new apps, requires changes to existing annotation app to handle nats CRUD messages.
- Requires staff to manage user access permissions (assuming service like Auth0, firebase, etc)
- Technically risky

