GRASP Application Programming Interface

draft-ietf-anima-grasp-api-01

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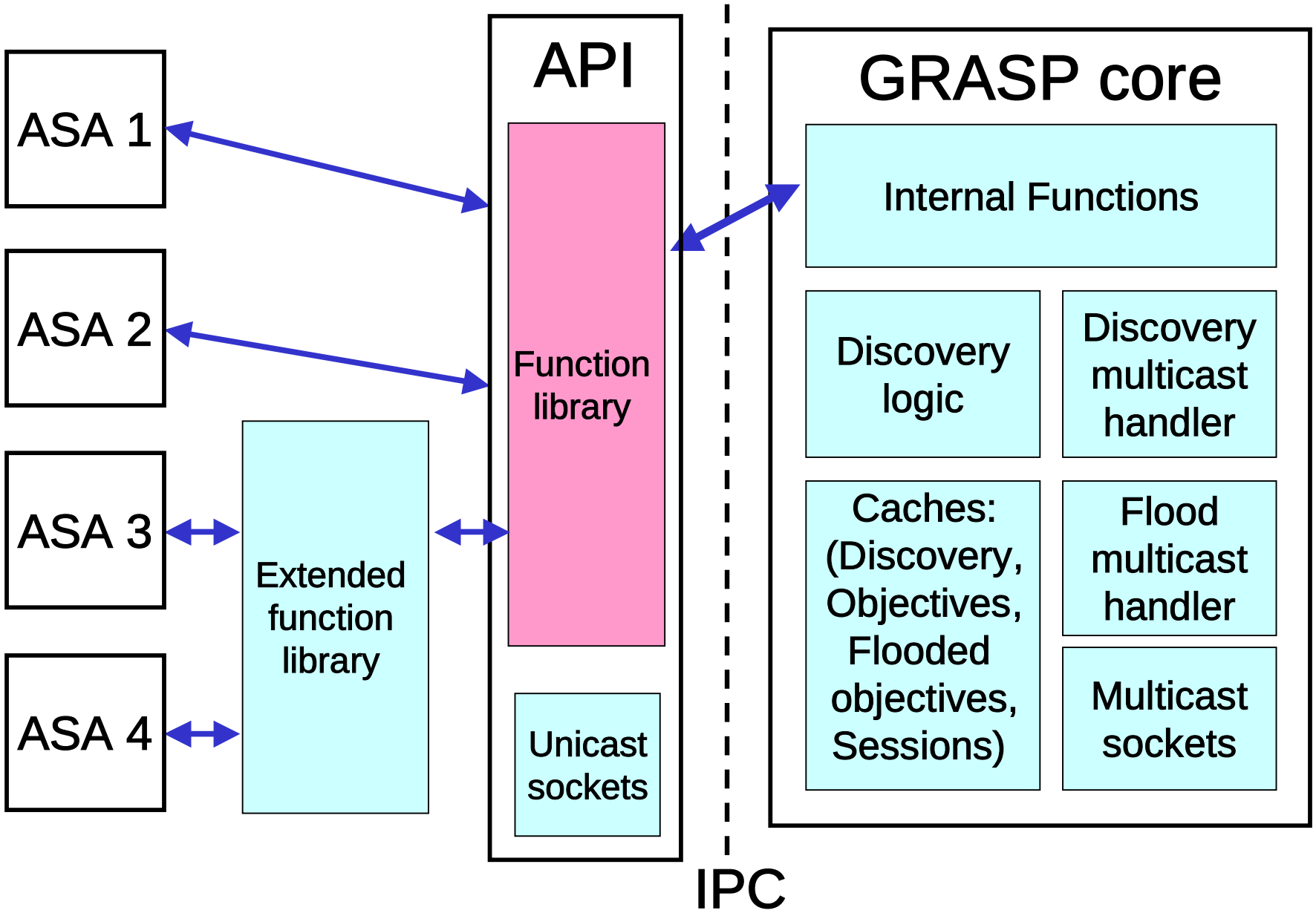
Topics

- Reminder
- Changes
- Open issues
- Request for help
- Discussion, next steps

Reminder: model



Brief summary of calls

- register (asa or objective)
- discover(objective)
- 5 negotiation calls
- 2 synchronization calls
- 2 flood calls

Changes since IETF 101

- Expanded and improved description of event-loop model (next slide)
  - Review needed!
- Minor technical corrections
- Editorial improvments

Event loop model

- In an event loop, blocking calls are not OK, so all API calls must be non-blocking.
- The main loop supports multiple GRASP sessions in parallel by repeatedly checking each one for a change of state.
- The API will provide non-blocking versions of all functions that involve waiting. A 'noReply' code is returned instead of blocking, until the awaited event (or a failure) occurs.

Open issues

- A few GRASP features lack API support in the current spec:
  - explicit locators for an objective
  - rapid mode synchronization
  - rapid mode negotiation
- Do we need an IANA registry for the error codes?

Need help

- Mapping to Python threading was easy
- Still need help on developing a robust mapping to C event-loop
  - Early draft of header file at **`https://github.com/becarpenter/graspy/blob/master/graspi.h`**

Discussion + next steps

- Comments? Questions?