

GRASP Application Programming Interface

draft-liu-anima-grasp-api-03

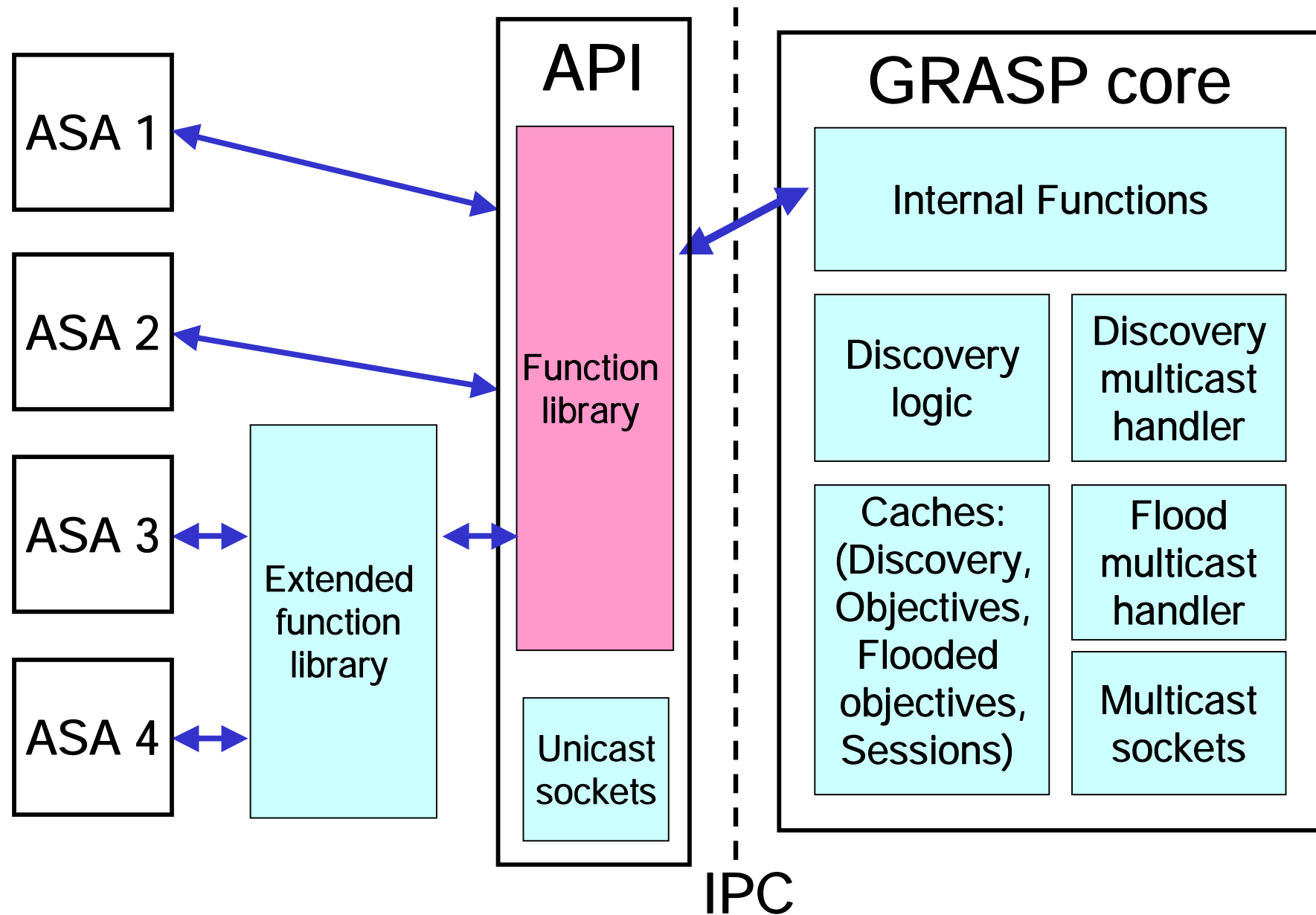
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Topics

- Overview
- Changes
- Request for help
- Discussion, next steps

Implementation model



Important data structures

- objective
 - .name
 - .syn *or* .neg
 - .loop_count
 - .value # any structure you want
- ASA_locator
 - .locator # normally IPv6 address
 - .protocol # IPPROTO_TCP or IPPROTO_UDP
 - .port
 - .etc

Simplified summary of calls (1)

- `register_asa(asa_name)`
- `register_objective(objective)`
- `discover(objective)`

Simplified summary of calls (2)

- `request_negotiate(objective, peer)`
- `listen_negotiate(objective)`
- `negotiate_step(objective)`
- `negotiate_wait(timeout)`
- `end_negotiate(result, reason)`

Simplified summary of calls (3)

- `synchronize(objective, peer)`
- `listen_synchronize(objective)`
- `flood(objectives)`

Recent changes

- Integrated various changes to GRASP
- Changed to integer error code returns
- Required implementations to accept objective values in CBOR
- Added non-blocking versions of each blocking call

Need help

- Mapping to Python was easy
- Need help on developing a robust mapping to C
 - Early draft of header file at
`https://www.cs.auckland.ac.nz/~brian/graspy/graspi.h`

Discussion + next steps

- Comments? Questions?
- Should the WG take up this topic?

