

OPENCOARRAYS & F18 INTEGRATION PLAN

ADD COARRAY SUBROUTINES THAT DON'T NEED ARGUMENTS

Trivial to map over. Add additional arguments later on

- `this_image()`
- `num_images()`
- `sync_images()`
- Etc.

ADD COLLECTIVE SUBROUTINES

- `co_broadcast()`
- `co_max()`
- `co_min()`
- `co_sum()`

ADD COARRAY TEAMS

```
type(team_type) :: team
integer :: my_team
my_team = mod(this_image()-1,2)+1
form team(my_team, team)
```

TODO

- Need to figure out data structure for holding teams
- Will OpenCoarrays library hold info about teams or f18?

ADD COARRAYS: WHO OWNS WHAT & WHICH DATA STRUCTURES TO USE

- Start with allocation
- During memory allocation for coarray, descriptor (`caf_token_t`) gets created
- Handling memory allocation goes to OpenCoarrays
- Pass `caf_token_t` to F18 and they'll store it? They'll need it for calling `caf_get`, `caf_put` etc.

REMAINING QUESTIONS

- When do we lower coarray information, soon or later?
- What will f18 want to store?
 - caf_token_t (naturally)
 - this_image? (this will change depending on teams?)