

# Sunfish development workflow

Proposal

Christian Pinto  
IBM Research Europe

- New ideas/functionalities proposal, development and acceptance
- Code development

# How to submit a new idea for review

- Submit a new issue on GitHub
  - Tag the issue with the *feature* label
  - Describe the problem you are trying to solve
  - Propose a detailed solution approach
    - Include charts, code snippets or whatever you deem to be necessary.
- Prepare a slide deck for presentation to the Sunfish plenary meetings
  - Attach the deck to the github issue
  - Email the WG co-chairs to get a slot in the agenda
  - Update the issue after the weekly meeting discussion
  - Anything that people should have a look at must be attached to the GH issue
- You can also have your code implemented already
  - Open a pull request (see next slide) and link it with the issue
  - It will be reviewed/merged only after the issue is approved
- Iterate until the solution is approved
  - When approved the co-chairs will label the issue as *approved*.

Same applies to documentation. Just label the issue as documentation

The screenshot shows a GitHub issue page for "Use the Context property to identify different Agents #12". The issue is labeled as a "feature" and was opened by user "mgazz" 3 weeks ago. The main content of the issue includes a comment from "mgazz" describing a problem with the current approach to handling events. The comment mentions that currently, at the reception of an "AggregationSourceDiscovered" event, the library creates an "AggregationSource" object locally and imports a reference of the "Fabrics" exposed by the Agent. It notes that in case of a delayed reception of the "ResourceCreated" event, the state results are inconsistent. The comment also states that agents do not possess an identifier to discriminate themselves, and Sunfish needs to inspect the resource to find the "ManagingAgent".

The comment proposes updating the current mechanism and PATCH the Subscription describing the "EventDestination" stored in the Agent with a "Context" that matches the Id of the "AggregationService" persistent in Sunfish. An example of "EventDestination" on the Sunfish Agent is provided, where "Context" is the Id of the "AggregationSource" generated by Sunfish as part of the registration.

```
cat EventService/Subscriptions/SunfishServer/Index.json
{
  "@odata.id": "/redfish/v1/EventService/Subscriptions/SunfishServer",
  "@odata.type": "#EventDestination.EventDestination",
  "Context": "dc83fb9e-568a-468f-b2e4-df8a3892e578",
  "Destination": "http://localhost:5000/EventService",
  "EventFormatType": "Event",
  "Id": "SunfishServer",
  "OriginResources": [
    {
      "@odata.id": "/redfish/v1/Fabrics"
    }
  ],
  "Protocol": "Redfish",
  "RegistryPrefixes": [
    "Basic"
  ],
  "SubordinateResources": "True"
}
```

With this approach events sent to an "EventDestination" can report the "Context", and aid Sunfish in identifying the source of the message. An example of a message with "Context" is also provided:

```
{
  "@odata.type": "#Event.v1_7_0.Event",
  "Id": "2",
  "Name": "Fabric Created",
  "Context": "dc83fb9e-568a-468f-b2e4-df8a3892e578",
  "Events": [
    {
      "EventType": "Other",
      "EventId": "4595",
      "Severity": "OK",
      "Message": "New Resource Created ",
      "MessageId": "Resource.1.0.ResourceCreated",
      "MessageArgs": [
        {
          "OriginCondition": {
            "@odata.id": "/redfish/v1/Fabrics/CXL"
          }
        }
      ]
    }
  ]
}
```

The right sidebar of the GitHub issue shows the "Assignees" section with "mgazz" listed, and the "Labels" section with the "feature" label applied. The "Development" section indicates that the issue is successfully merged into a pull request.

# Implementation of the new feature

- Whoever created the issue takes responsibility for providing an implementation
  - Not necessarily the person but the organization they represent within Sunfish
- When the code is ready submit a pull request named as:
  - Issue `ISSUE_NUMBER` (See figure on the right)
    - `ISSUE_NUMBER` is the number of the issue created for proposing the new feature
  - The PR must be created from a fork of the original project
    - Fork the project in your GH account, create a branch named `issue-ISSUE_NUMBER`
  - Link the PR with the issue

Issue 12 #16

**Open** mgazz wants to merge 7 commits into `OpenFabrics:main` from `mgazz:issue-12`

Conversation 0 Commits 7 Checks 2 Files changed 9

mgazz commented 2 weeks ago

This PR is a follow up of [#15](#)

- It updates the handlers processing the `AggregationSourceDiscovered` and `ResourceCreated` events. At the reception of the `AggregationSourceDiscovered` event the handler adds a UUID as `Context` to the Subscription. The Agent will have to add such `Context` to the following Events issued to the Sunfish server.
- It adds a Makefile simplifying the steps to build the `whl`

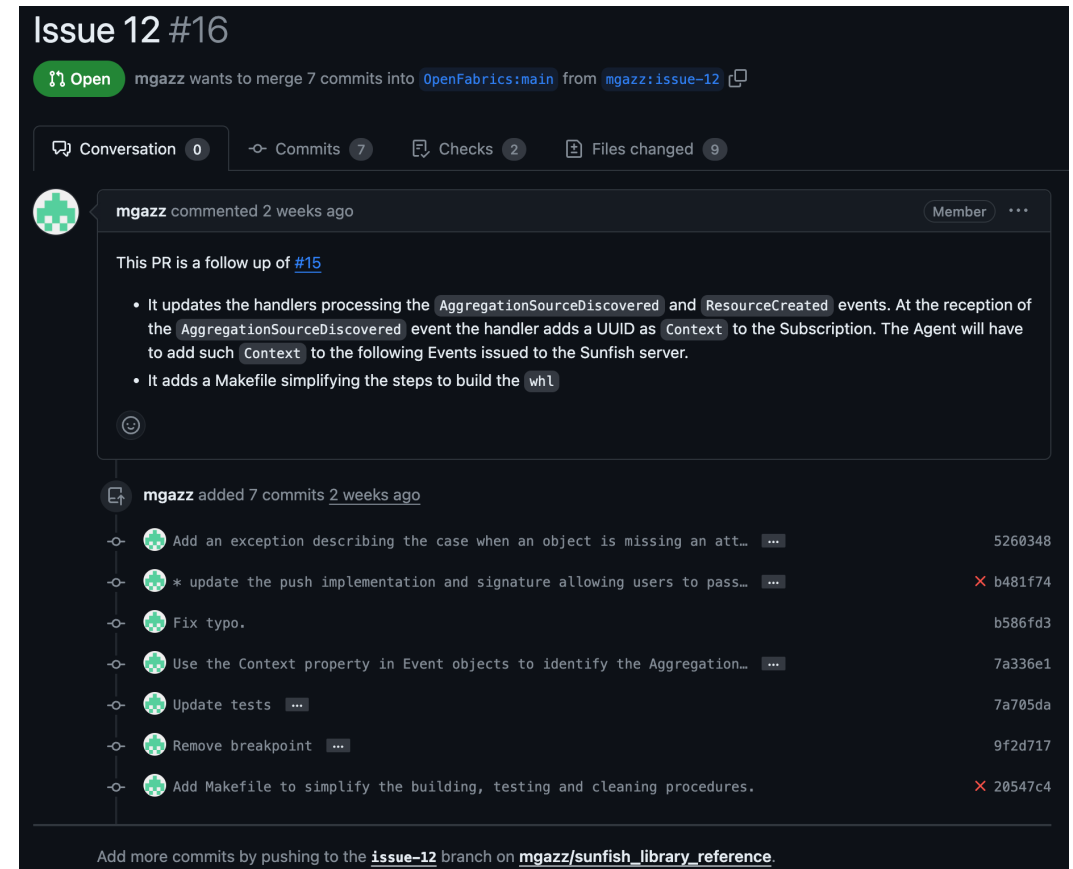
mgazz added 7 commits 2 weeks ago

- Add an exception describing the case when an object is missing an att... 5260348
- \* update the push implementation and signature allowing users to pass... b481f74
- Fix typo. b586fd3
- Use the Context property in Event objects to identify the Aggregation... 7a336e1
- Update tests ... 7a705da
- Remove breakpoint ... 9f2d717
- Add Makefile to simplify the building, testing and cleaning procedures. 20547c4

Add more commits by pushing to the `issue-12` branch on `mgazz/sunfish_library_reference`.

# Implementation of the new feature

- Can I request a feature that I cannot implement?
  - This is the case for bugs or nice-to-have features
  - Label the issue as *bug* or *nice-to-have*
  - The issue will be evaluated by the maintainers and discussed at the next weekly meeting (time allowing) where feasibility and priority will be identified
    - Questions may be asked on the issue for further clarifications
  - If important and someone can take over implementation, it will be done following the same PR style in prev slide.

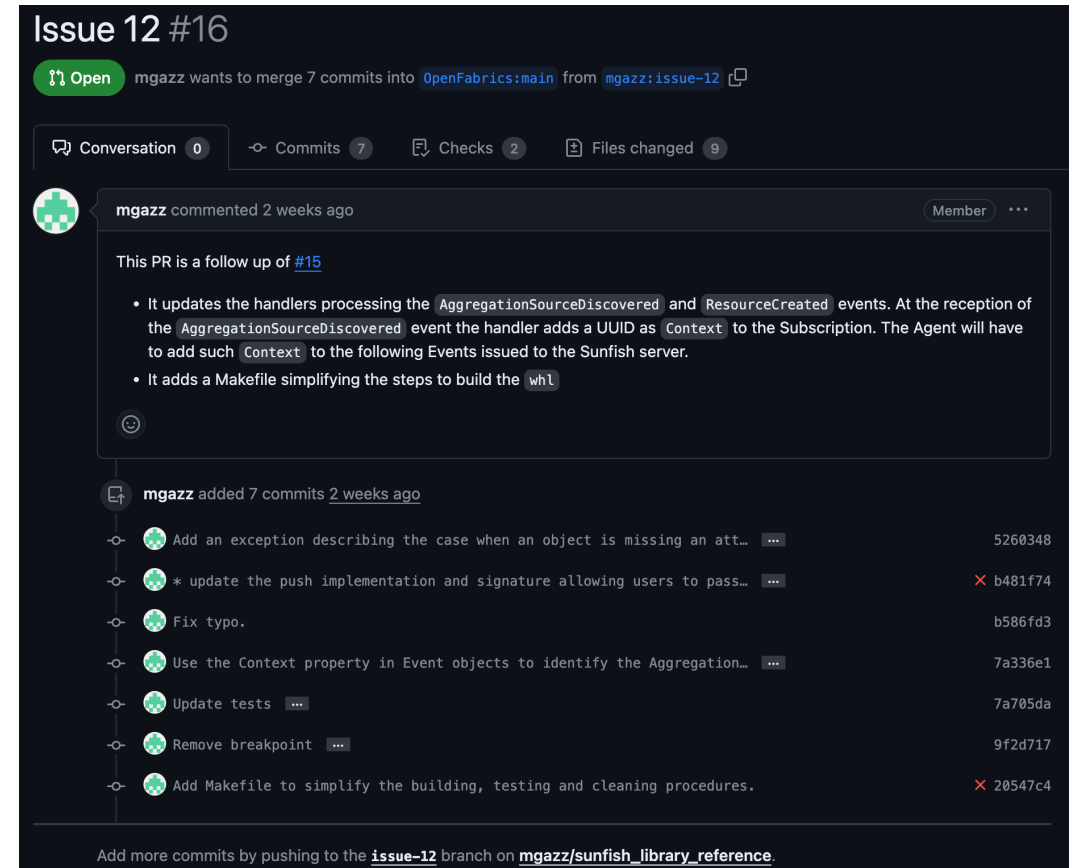


The screenshot shows a GitHub Pull Request (Issue 12 #16) with the following details:

- Issue 12 #16**: mgazz wants to merge 7 commits into `OpenFabrics:main` from `mgazz:issue-12`.
- Conversation**: 0, **Commits**: 7, **Checks**: 2, **Files changed**: 9.
- Comment by mgazz (2 weeks ago)**:
  - This PR is a follow up of [#15](#).
  - It updates the handlers processing the `AggregationSourceDiscovered` and `ResourceCreated` events. At the reception of the `AggregationSourceDiscovered` event the handler adds a UUID as `Context` to the Subscription. The Agent will have to add such `Context` to the following Events issued to the Sunfish server.
  - It adds a Makefile simplifying the steps to build the `whl`.
- Commits added 2 weeks ago**:
  - Add an exception describing the case when an object is missing an att... (5260348)
  - \* update the push implementation and signature allowing users to pass... (b481f74)
  - Fix typo. (b586fd3)
  - Use the Context property in Event objects to identify the Aggregation... (7a336e1)
  - Update tests (7a705da)
  - Remove breakpoint (9f2d717)
  - Add Makefile to simplify the building, testing and cleaning procedures. (20547c4)
- Footer**: Add more commits by pushing to the `issue-12` branch on `mgazz/sunfish_library_reference`.

# Reviewing a PR

- At least 2 reviewers are required for each PR
- The code MUST be checked out and tested
  - Do not just click "approved"
  - I know we have automated tests
- The code must be looked at thoroughly and verified for bad programming habits, issues with the implementation, etc...
  - Add comments in the review accordingly and request for changes



The screenshot displays a GitHub Pull Request interface. At the top, it shows 'Issue 12 #16' and a green 'Open' button. Below this, it indicates 'mgazz wants to merge 7 commits into OpenFabrics:main from mgazz:issue-12'. A navigation bar shows 'Conversation 0', 'Commits 7', 'Checks 2', and 'Files changed 9'. A comment from 'mgazz' (Member) states: 'This PR is a follow up of #15'. The comment contains two bullet points: 'It updates the handlers processing the AggregationSourceDiscovered and ResourceCreated events. At the reception of the AggregationSourceDiscovered event the handler adds a UUID as Context to the Subscription. The Agent will have to add such Context to the following Events issued to the Sunfish server.' and 'It adds a Makefile simplifying the steps to build the whl'. Below the comment, a section titled 'mgazz added 7 commits 2 weeks ago' lists the following commits:

- Add an exception describing the case when an object is missing an att... 5260348
- \* update the push implementation and signature allowing users to pass... b481f74
- Fix typo. b586fd3
- Use the Context property in Event objects to identify the Aggregation... 7a336e1
- Update tests ... 7a705da
- Remove breakpoint ... 9f2d717
- Add Makefile to simplify the building, testing and cleaning procedures. 20547c4

At the bottom, it says 'Add more commits by pushing to the issue-12 branch on mgazz/sunfish\_library\_reference.'

# Regular maintenance updates on issues

- Use ~ 10 minutes in the weekly meeting for discussing open issues that are important
- Request further comments in the issue thread should it be needed
- Record any updates in the issue thread

# Summary

- If it's not on GitHub it DOES NOT EXIST
- If it wasn't discussed (either on GH or in a meeting) and approved it will never be merged
- Do not push your code randomly

