

# CGI POC

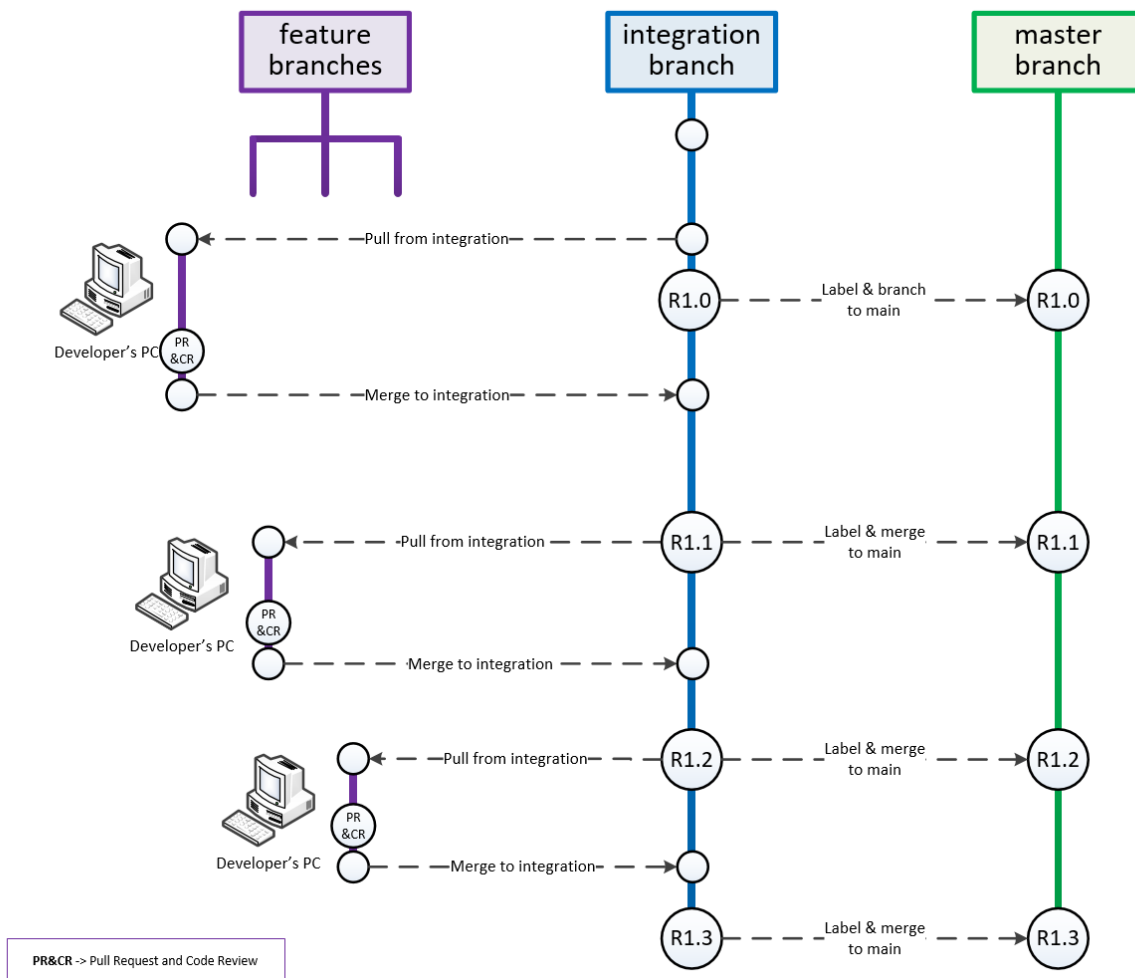
## Code Management

### Introduction

This document explains the CGI approach to source code management during the ADPQ POC: feature branch, write code, code review, and merge feature branch to integration branch. Developer collaboration and peer review roles are also outlined.

### Process

The following picture depicts the source code management:

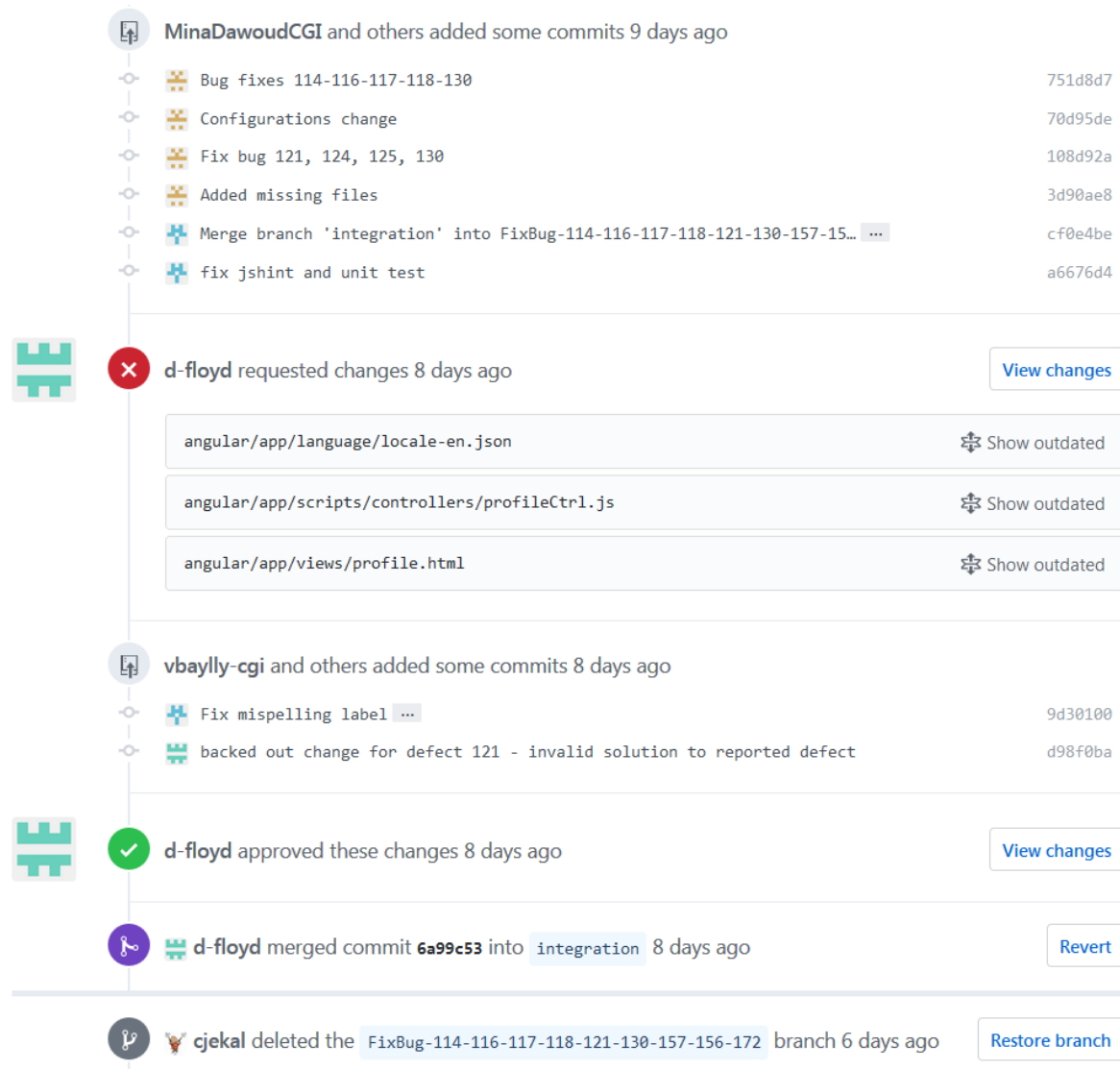


Steps:

- 1) The developer creates a Feature branch from the Integration branch in their local environment
- 2) The developer writes Unit Tests and Source Code for the feature.
- 3) The developer makes sure the unit tests run successfully using the latest version of the integration branch.
- 4) The developer initiates a "Pull Request" when he/she is ready to merge the feature branch into the integration branch.
- 5) The "Pull Request" triggers a Code Review.
- 6) A pre-assigned developer or technical architect starts the code peer review of the feature. The code peer review includes the following check list:
  - a. The branch is a feature branch
  - b. Compliance with the project code standards.
    - i. Unit tests
    - ii. Source code management
    - iii. Naming conventions
    - iv. Reuse conventions
    - v. Error handling
  - c. Execute unit tests to make sure the new code does not break other components' source code.
- 7) Peer Code review result is PASS/FAIL. If PASS the feature branch is merged in the Integration branch. If FAIL, the developer is notified of the issues to fix.
- 8) If the code review Failed, and the developer fixes the issues, start this process at step 2)

Example of a developer peer review/comment exchange during a change request.

Final entry shows Approval post updates.



The image displays a GitLab interface showing a sequence of events for a merge request. At the top, a commit by MinaDawoudCGI and others is shown with a list of changes: 'Bug fixes 114-116-117-118-130', 'Configurations change', 'Fix bug 121, 124, 125, 130', 'Added missing files', 'Merge branch 'integration' into FixBug-114-116-117-118-121-130-157-15...', and 'fix jshint and unit test'. Below this, a merge request by d-floyd is shown with a red 'X' icon, indicating it was requested for changes 8 days ago. The merge request details show three files: 'angular/app/language/locale-en.json', 'angular/app/scripts/controllers/profileCtrl.js', and 'angular/app/views/profile.html', each with a 'Show outdated' link. Below the merge request, a commit by vbaylly-cgi and others is shown with changes: 'Fix misspelling label ...' and 'backed out change for defect 121 - invalid solution to reported defect'. Finally, a merge request by d-floyd is shown with a green checkmark icon, indicating it was approved 8 days ago. Below the approval, a merge by d-floyd is shown, merging commit 6a99c53 into the integration branch. At the bottom, a branch deletion event is shown by cjekal, deleting the FixBug-114-116-117-118-121-130-157-156-172 branch 6 days ago.

MinaDawoudCGI and others added some commits 9 days ago

- Bug fixes 114-116-117-118-130
- Configurations change
- Fix bug 121, 124, 125, 130
- Added missing files
- Merge branch 'integration' into FixBug-114-116-117-118-121-130-157-15...
- fix jshint and unit test

d-floyd requested changes 8 days ago

angular/app/language/locale-en.json

angular/app/scripts/controllers/profileCtrl.js

angular/app/views/profile.html

vbaylly-cgi and others added some commits 8 days ago

- Fix misspelling label ...
- backed out change for defect 121 - invalid solution to reported defect

d-floyd approved these changes 8 days ago

d-floyd merged commit 6a99c53 into integration 8 days ago

cjekal deleted the FixBug-114-116-117-118-121-130-157-156-172 branch 6 days ago