LF
NETWORKING
LFN Developer & Testing Forum

OOM journey from Gerrit / Jenkins to Gitlab

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Agenda

- OOM and gerrit's use
  - Jenkins
  - Gating via Gitlab CI
- Job migration to gitlab
  - Sensitive tasks
  - Linting
  - Gating
- Next steps

Jenkins limitations

- Jenkins from LFN uses VM to perform the jobs
  - Therefore, dependencies are shared
  - Complicated to test code against different versions of same executable
  - JJB are thought for maven and (a bit) docker and not for helm
- For OOM committers, Jenkins adds more issues than it helps

OOM and current gerrit use

- LF rule enforcement is done via git hooks on gerrit
  - CLA signature check
  - “Issue-ID” and “Signed-by” being set check

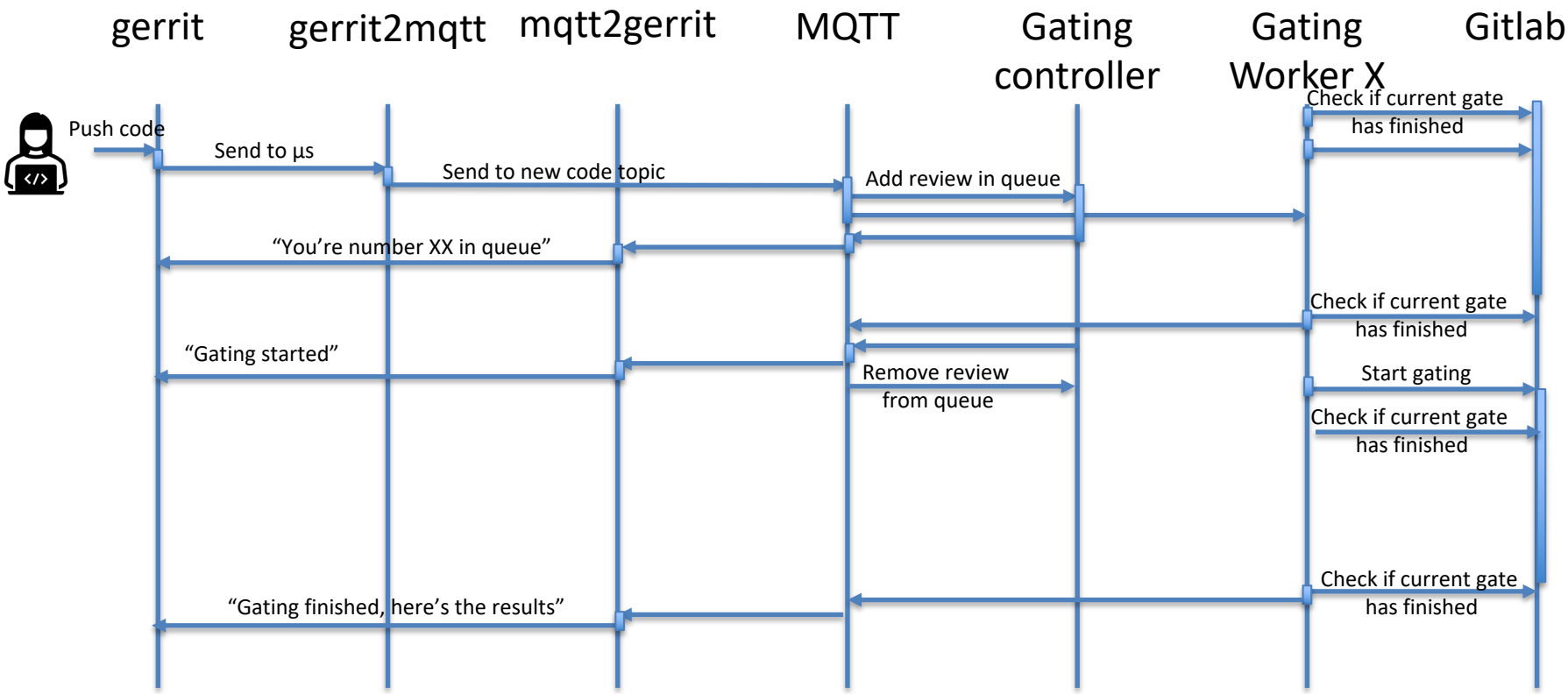
OOM and current Jenkins use

- Jenkins performs “linting”
  - Helm linting
  - Bash script linting
  - No whitespaces / tabs linting
  - Image being released linting
  - Commit message format linting
  - Documentation linting (doc8, link check, …)

OOM and current Gitlab CI use

- Gitlab CI (+ some micro services) performs gating
  - Each gerrit review sent to OOM (and integration and core SO) are deployed
  - We then check that everything works when deployed

OOM and current Gitlab CI use

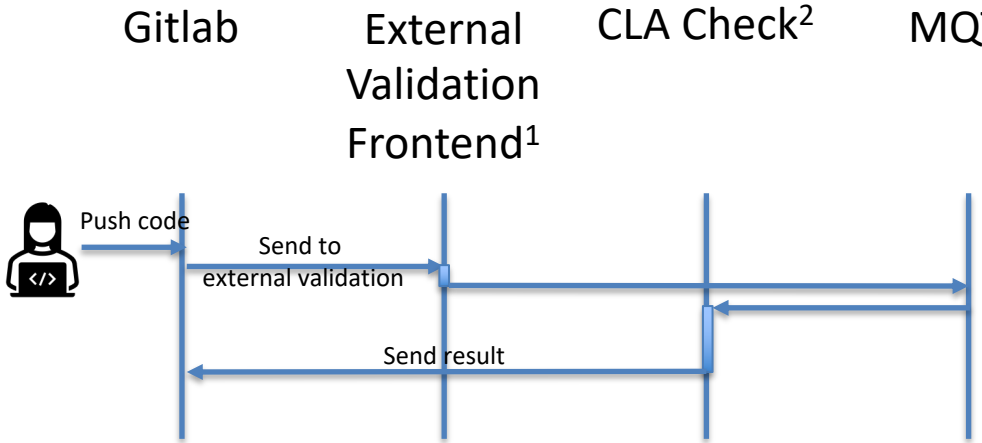


Job migration to gitlab: sensitive tasks

- Some tasks are sensitive because they need to have access to sensitive data
- CLA check needs to have list of all users with signed CLA
- Helm upload needs to have credentials to push into ONAP nexus

Job migration to gitlab: sensitive tasks

- CLA check: use ”external validation”



CLA check will

- Update users lists if too old (once every hour)
- Take the list of all code authors from the merge request
- Validate they’re present in one of user lists
- Approve / disapprove according to the result

1: https://gitlab.com/Orange-OpenSource/lfn/onap/gating-tools/external-approval-listener
2: https://gitlab.com/Orange-OpenSource/lfn/onap/gating-tools/cla-checker

Job migration to gitlab: sensitive tasks

- Helm upload: (will) use protected / hidden environment variables
  - Creds will be set into protected and hidden variables
    - They can be used only on procted branches (master + ‘stable/*’)
    - Script using them won’t show them
    - Can’t be retrieved out of OOM repo

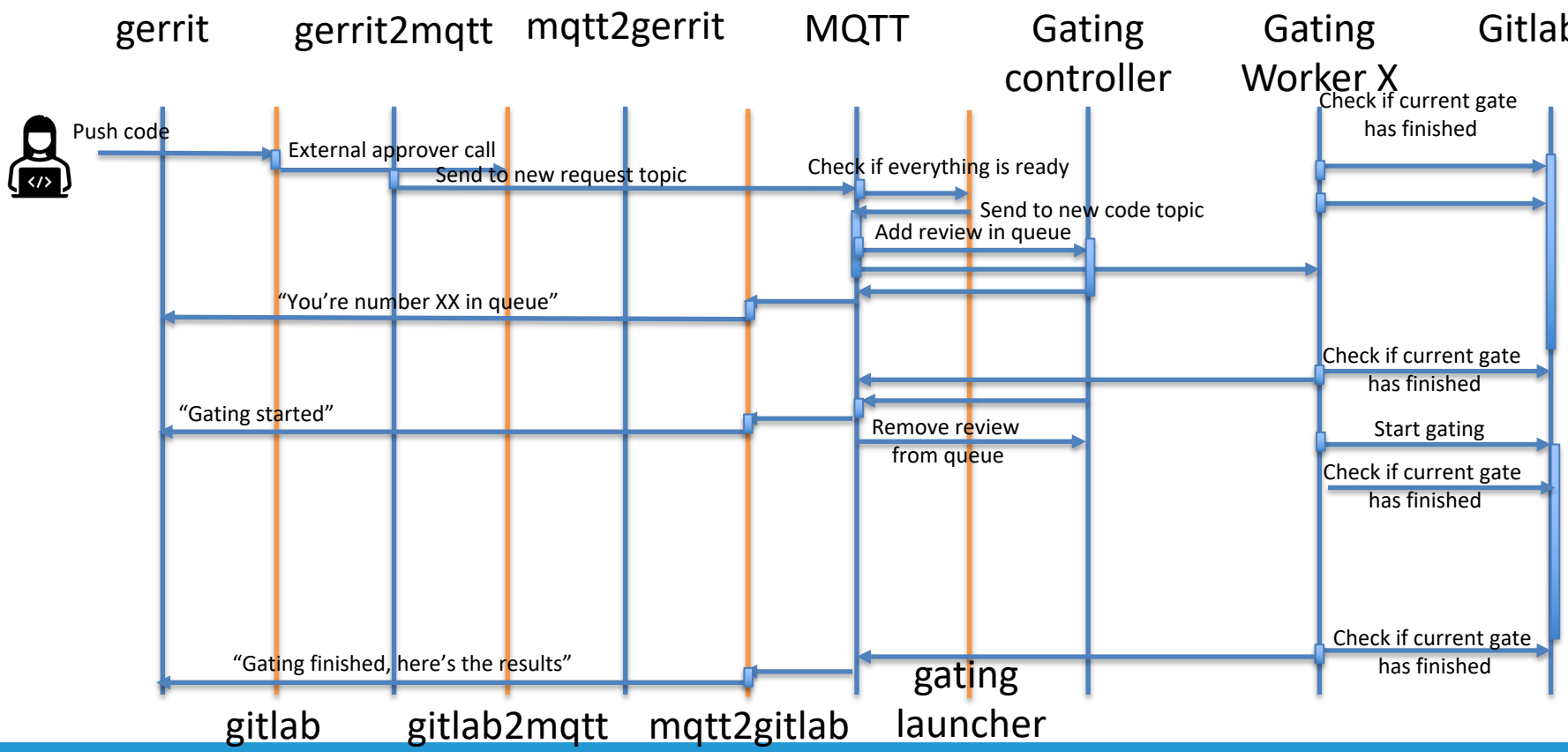
Job migration to gitlab: linting

- All linting tasks will be performed into dedicated steps using
  - Dedicated docker container(s) (helm linter will use a matrix of container in order to check against needed versions)
  - Simple scripts
- Tasks will be triggered only if needed:
  - Doc task will be triggered only if “doc” folder is touched
  - Helm / gating / linting will be triggered only if “Kubernetes” folder is triggered

Job migration to gitlab: launching gates

- Launching gates has 2 issues to solve:
  - We need to be able to work in ”gerrit triggerd” mode and in “gitlab triggered” mode
  - We have a limited number of systems for the gate so the queue system must remain

Job migration to gitlab: launching gates



Job migration to gitlab: launching gates

- Gating launcher[1] will:
  - Check that Kubernetes folder has changed
  - Check that helm linting is OK
  - If yes, ask for a gate
- Gitlab2mqtt is the same tool as CLA check External Validation Frontend[2]
- MQTT2Gitlab[3] is a new µs

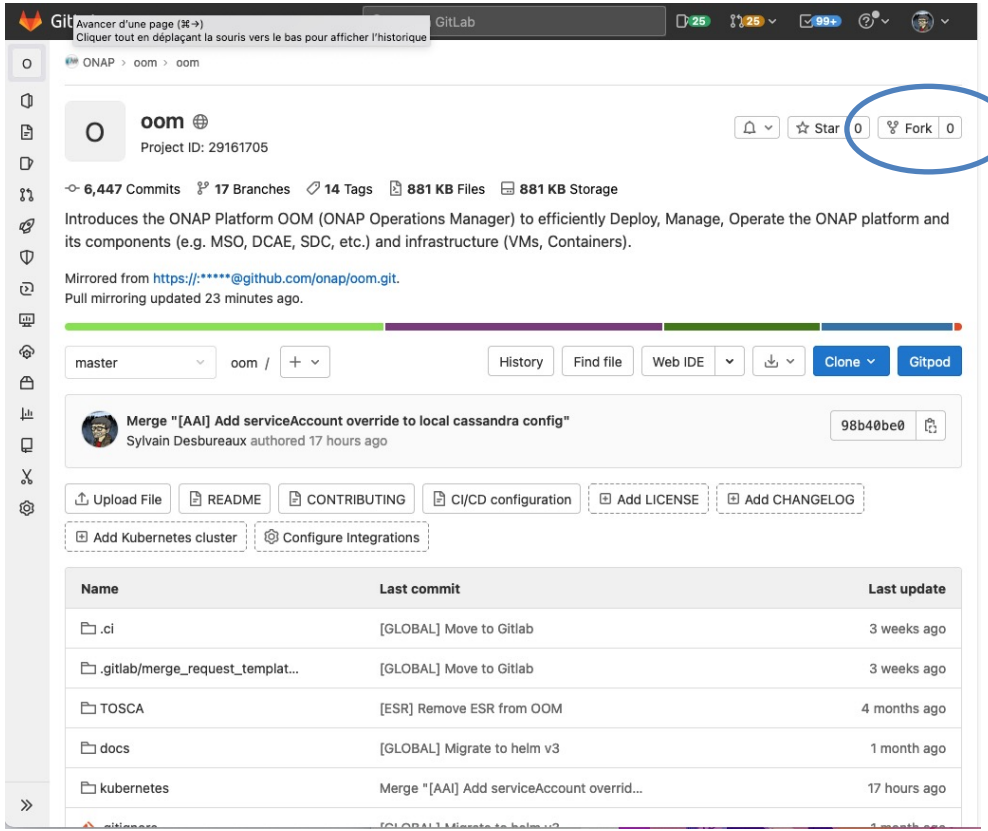
1: https://gitlab.com/Orange-OpenSource/lfn/onap/gating-tools/gating-launcher
2: https://gitlab.com/Orange-OpenSource/lfn/onap/gating-tools/external-approval-listener
3: https://gitlab.com/Orange-OpenSource/lfn/onap/gating-tools/mqtt-to-gitlab-mr

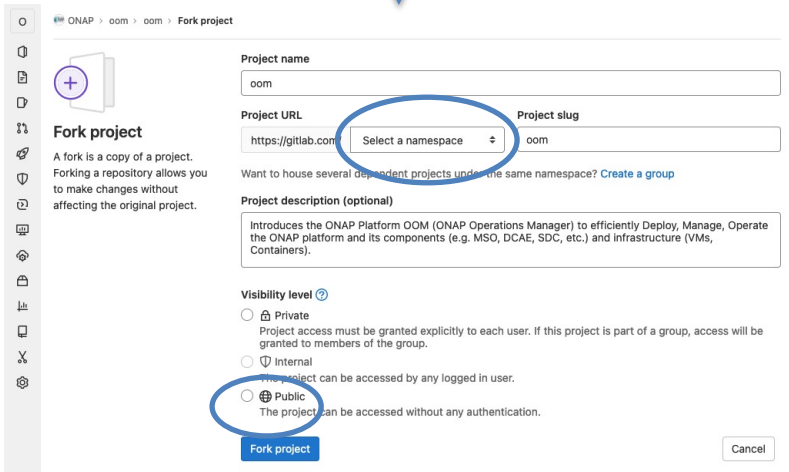
Next steps

- All µs are deployed on ONAP Azure tooling zone (on Kubernetes)
- Tests have been made and it works
- We can migrate “when we want”
- Decide to move to Gitlab instead of Gerrit / Jenkins decision will be taken by the next OOM PTL

Annex

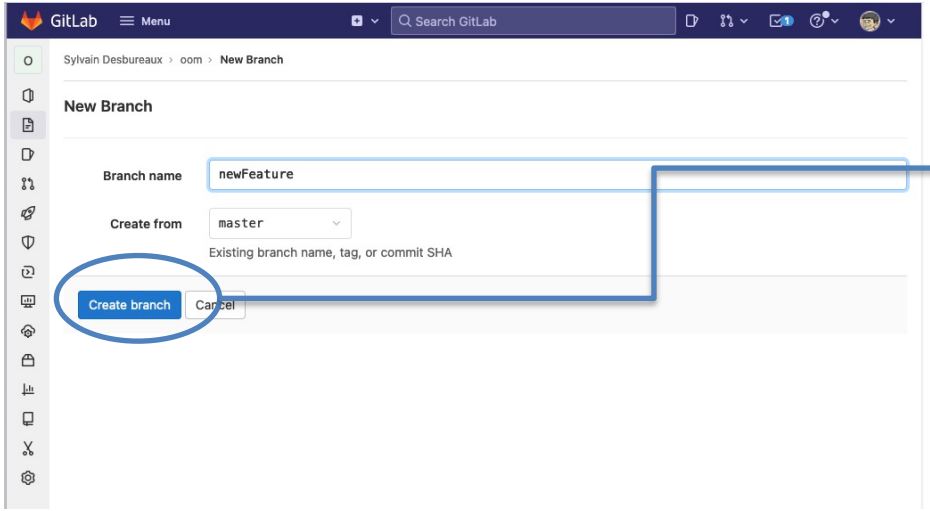
User journey to push code



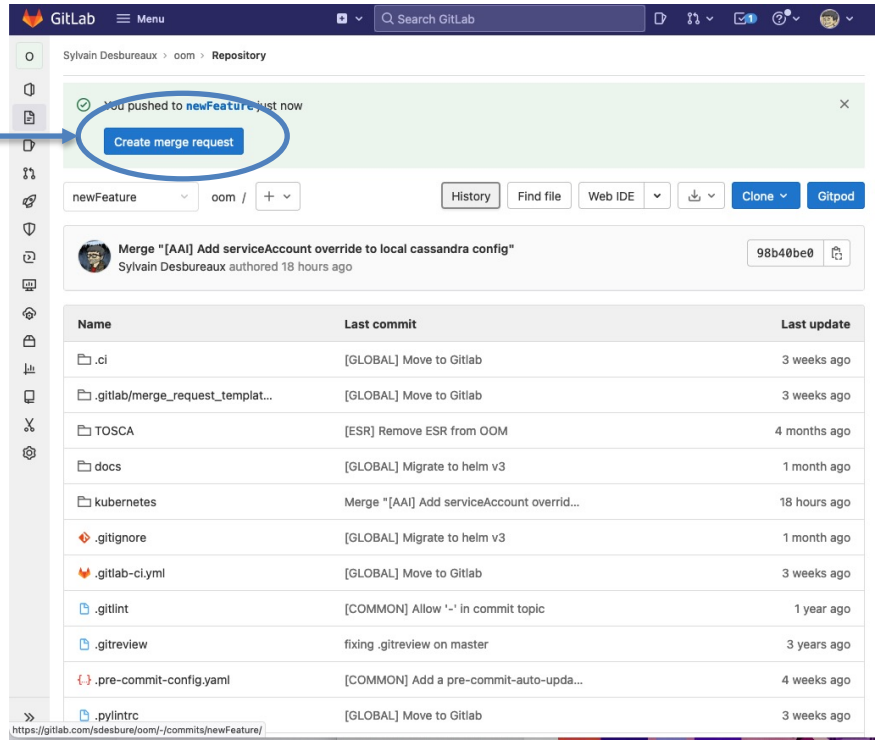


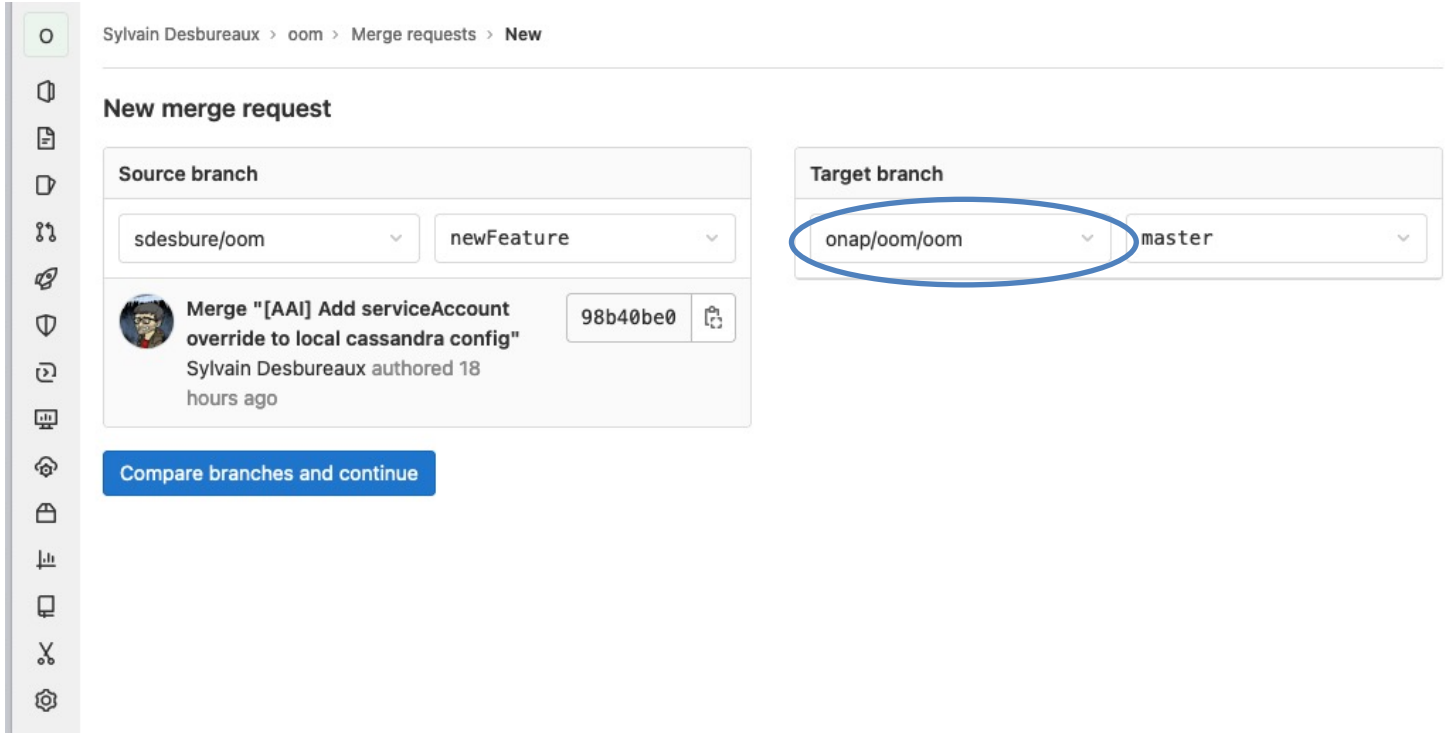
User journey to push code

Create a branch (via UI or git cli)



Click on create Merge Request



User journey to push code

Verify that the target branch is onap/oom/oom