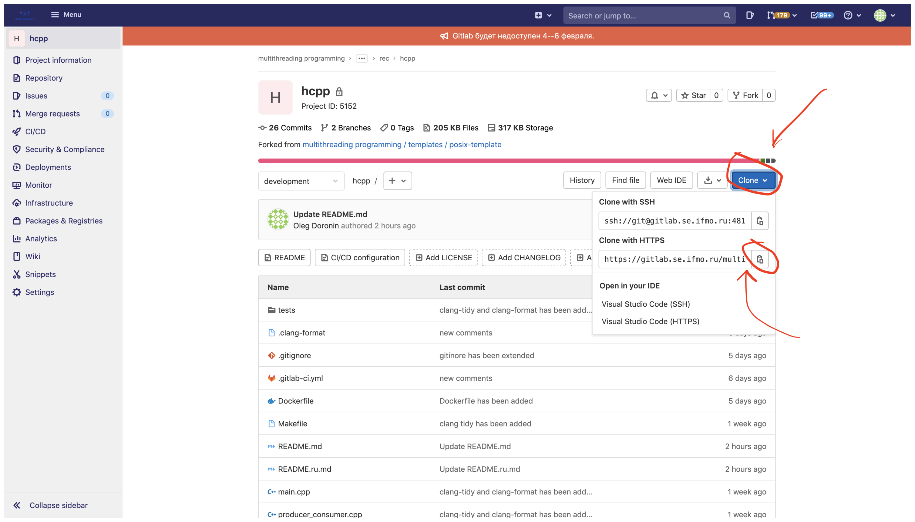
Working with Pipeline

1 Working with GIT and creating MR (merge request)

1. To work with GIT, it is recommended to familiarize yourself with the resources: ProGit и Learning Git Branching

2. After adding your gitlab login to the table, basic repositories will be created for you

3. To download the repository, open its page in gitlab and click **clone -> clone with https** and copy the url



Gitlab будет недоступен 4--6 февраля.

multithreading programming › ••• › rec › hcpp

hcpp
Project ID: 5152

26 Commits 2 Branches 0 Tags 205 KB Files 317 KB Storage

Forked from multithreading programming / templates / posix-template

Update README.md
Oleg Doronin authored 2 hours ago

Clone with SSH
ssh://git@gitlab.se.ifmo.ru:481

Clone with HTTPS
https://gitlab.se.ifmo.ru/multi

Name	Last commit	
tests	clang-tidy and clang-format has been add...	
.clang-format	new comments	
.gitignore	gitinore has been extended	5 days ago
.gitlab-ci.yml	new comments	6 days ago
Dockerfile	Dockerfile has been added	5 days ago
Makefile	clang tidy has been added	1 week ago
README.md	Update README.md	2 hours ago
README.ru.md	Update README.ru.md	2 hours ago
main.cpp	clang-tidy and clang-format has been add...	1 week ago
producer_consumer.cpp	clang-tidy and clang-format has been add...	1 week ago

4. Then we type **git clone** in the terminal and clone the repository:

```
$ R=https://gitlab.se.ifmo.ru/multithreading-programming/test-pipeline/rec/hcpp.git
$ GIT_SSL_NO_VERIFY=true git clone R
Cloning into 'hcpp'...
remote: Enumerating objects: 94, done.
```

```
remote: Counting objects: 100% (94/94), done.
remote: Compressing objects: 100% (51/51), done.
remote: Total 94 (delta 39), reused 94 (delta 39), pack-reused 0
Unpacking objects: 100% (94/94), done.
```

5. After that, you will have a directory with a repository. Next, you need to complete the task in the development branch and push it to the repository with separate commits. For example so:

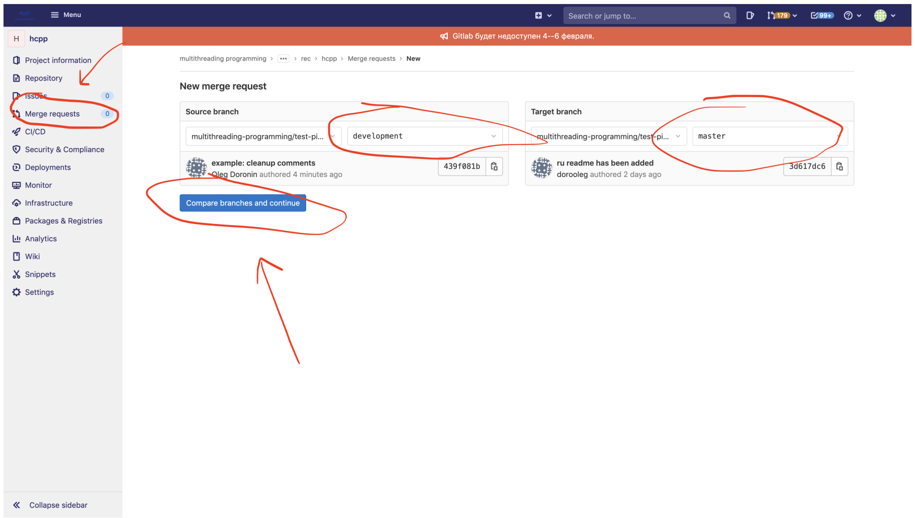
```
$ git status
On branch development
Your branch is up to date with 'origin/development'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

        modified:   producer_consumer.cpp

no changes added to commit (use "git add" and/or "git commit -a")
$ git add *
$ git commit -m "example: cleanup comments"
[development 439f081] example: cleanup comments
 1 file changed, 1 deletion(-)
$ GIT_SSL_NO_VERIFY=true git push origin development
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 301 bytes | 301.00 KiB/s, done.
Total 3 (delta 2), reused 0 (delta 0)
To https://gitlab.se.ifmo.ru/multithreading-programming/test-pipeline/rec/hcpp.git
   93862c3..439f081  development -> development
```

6. If the code is written and tested, you need to create a **merge request**. To do this, go to the **Merge requests** tab and click **New merge request**. As **target branch** we specify **master**, and **source branch - development**. And click **Compare branches and continue**. In **Reviewer** we add one of the teachers of the course. In **Title** we write the group, your full name and the name of the task. When the required fields are filled in, click **Create merge request**



Gitlab будет недоступен 4--6 февраля.

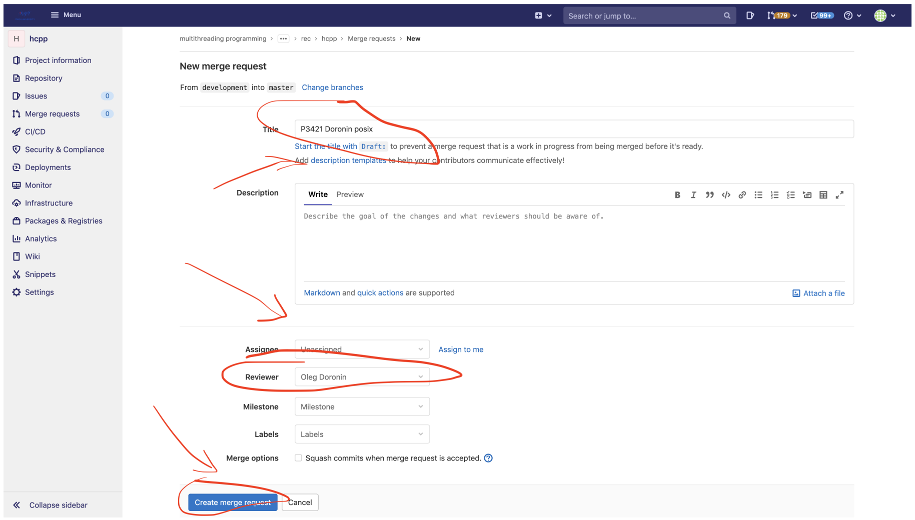
New merge request

Source branch: multithreading-programming/test-pi... development

example: cleanup comments
Oleg Doronin authored 4 minutes ago 439f081b

Target branch: multithreading-programming/test-pi... master

ru readme has been added
dorooleg authored 2 days ago 3d617dc6



New merge request

From `development` into `master` Change branches

Title: P3421 Doronin posix

Start the title with `Draft:` to prevent a merge request that is a work in progress from being merged before it's ready.

Add description templates to help your contributors communicate effectively!

Description: Describe the goal of the changes and what reviewers should be aware of.

Markdown and quick actions are supported — Attach a file

Assignee: Unassigned

Reviewer: Oleg Doronin

Milestone: Milestone

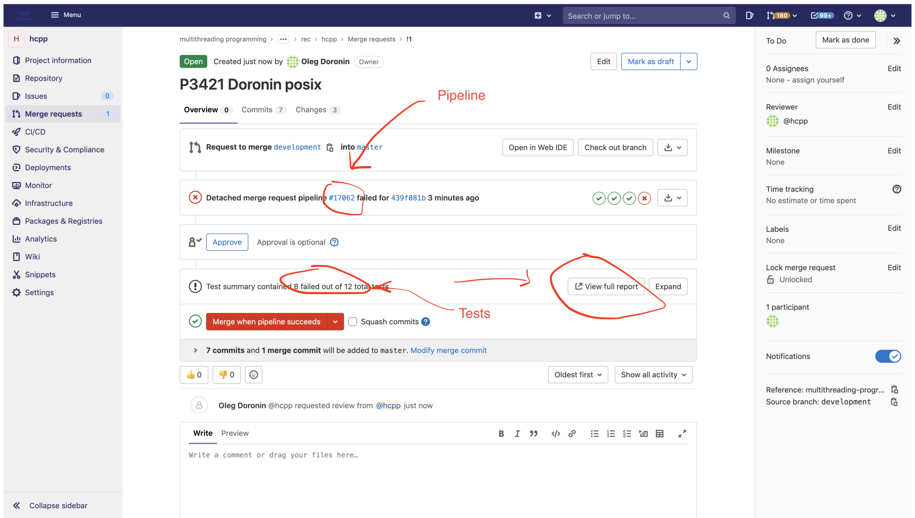
Labels: Labels

Merge options: ☐ Squash commits when merge request is accepted.

7. After that, all discussions will take place in this MR. The work is counted after all the tests are passed, the MR is closed and the results are displayed in the table

2 Working with GitLab Pipeline

1. To check that the Pipeline has worked successfully, you need to go to the Pipeline tab, which is automatically created after creating the MR and updating it



multithreading programming › ••• › rec › hcpp › Merge requests › !1

Open Created just now by Oleg Doronin Owner

P3421 Doronin posix

Overview 0 Commits 7 Changes 3

Request to merge `development` into `master`

Detached merge request pipeline #17062 failed for 439f081b 3 minutes ago

Approval is optional

Test summary contained 8 failed out of 12 total tests

☐ Squash commits

7 commits and 1 merge commit will be added to `master`. Modify merge commit

👍 0 👎 0

Oleg Doronin @hcpp requested review from @hcpp just now

Write a comment or drag your files here…

To Do

0 Assignees Edit
None - assign yourself

Reviewer Edit
@hcpp

Milestone Edit
None

Time tracking
No estimate or time spent

Labels Edit
None

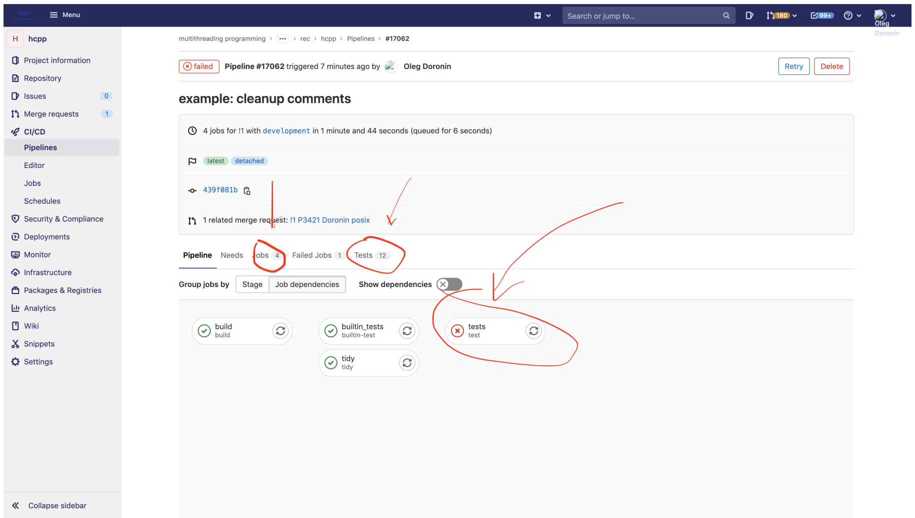
Lock merge request Edit
Unlocked

1 participant

Notifications

Reference: multithreading-progr…
Source branch: `development`

2. Go to the pipeline in which you can see how many tests have fallen. Which jobs ended with an error



multithreading programming › ••• › rec › hcpp › Pipelines › #17062

failed Pipeline #17062 triggered 7 minutes ago by Oleg Doronin

example: cleanup comments

4 jobs for !1 with `development` in 1 minute and 44 seconds (queued for 6 seconds)

latest detached

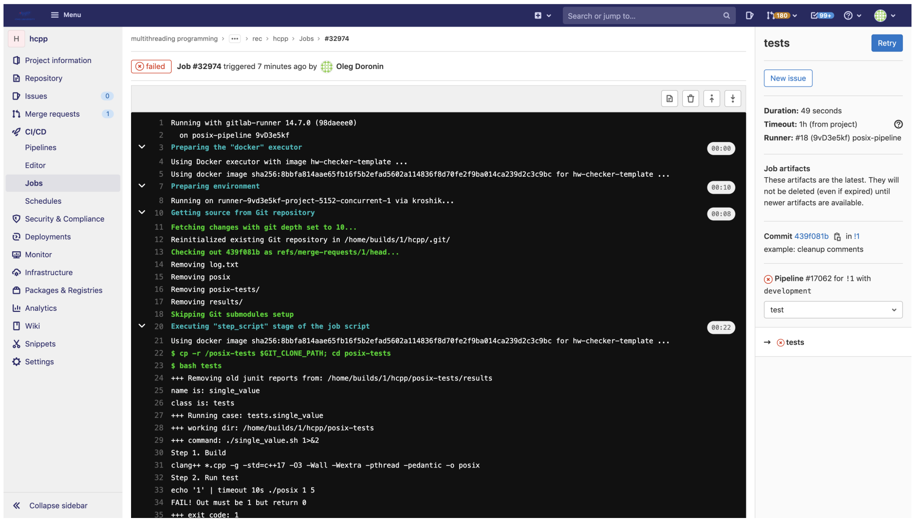
439f081b

1 related merge request: !1 P3421 Doronin posix

Group jobs by Stage Job dependencies Show dependencies

build — build
builtin_tests — builtin-test
tidy — tidy
tests — test

3. Then you can go to a specific job and find out the reason for the completion with an error and read the log



Job #32974 triggered 7 minutes ago by Oleg Doronin

```
Running with gitlab-runner 14.7.0 (98daeee0)
  on posix-pipeline 9vD3e5kf
Preparing the "docker" executor                                                    00:00
Using Docker executor with image hw-checker-template ...
Using docker image sha256:8bbfa814aae65fb16f5b2efad5602a114836f8d70fe2f9ba014ca239d2c3c9bc for hw-checker-template ...
Preparing environment                                                              00:10
Running on runner-9vd3e5kf-project-5152-concurrent-1 via kroshik...
Getting source from Git repository                                                 00:08
Fetching changes with git depth set to 10...
Reinitialized existing Git repository in /home/builds/1/hcpp/.git/
Checking out 439f081b as refs/merge-requests/1/head...
Removing log.txt
Removing posix
Removing posix-tests/
Removing results/
Skipping Git submodules setup
Executing "step_script" stage of the job script                                    00:22
Using docker image sha256:8bbfa814aae65fb16f5b2efad5602a114836f8d70fe2f9ba014ca239d2c3c9bc for hw-checker-template ...
$ cp -r /posix-tests $GIT_CLONE_PATH; cd posix-tests
$ bash tests
+++ Removing old junit reports from: /home/builds/1/hcpp/posix-tests/results
name is: single_value
class is: tests
+++ Running case: tests.single_value
+++ working dir: /home/builds/1/hcpp/posix-tests
+++ command: ./single_value.sh 1>&2
Step 1. Build
clang++ *.cpp -g -std=c++17 -O3 -Wall -Wextra -pthread -pedantic -o posix
Step 2. Run test
echo '1' | timeout 10s ./posix 1 5
FAIL! Out must be 1 but return 0
+++ exit code: 1
```

tests

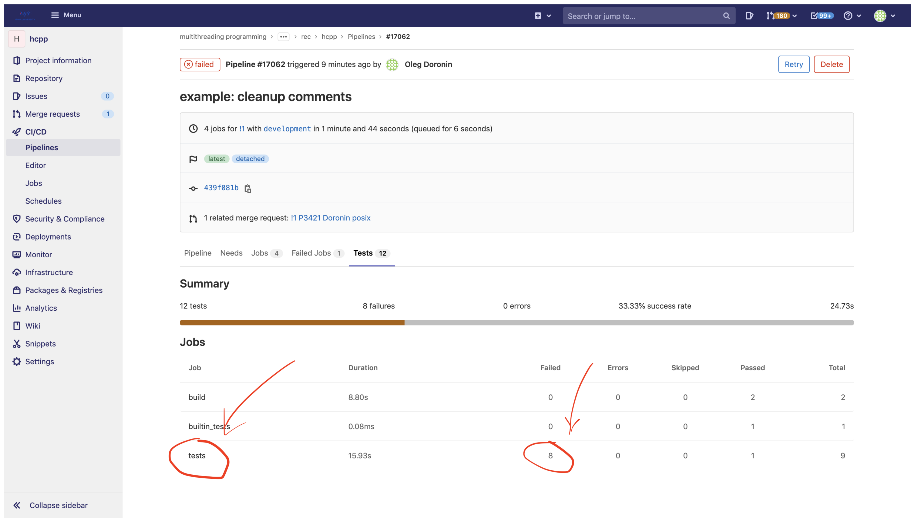
Duration: 49 seconds
Timeout: 1h (from project)
Runner: #18 (9vD3e5kf) posix-pipeline

Job artifacts
These artifacts are the latest. They will not be deleted (even if expired) until newer artifacts are available.

Commit 439f081b in !1
example: cleanup comments

Pipeline #17062 for !1 with development

4. To view all the tests, go to View full report



Pipeline #17062 triggered 9 minutes ago by Oleg Doronin

example: cleanup comments

4 jobs for !1 with development in 1 minute and 44 seconds (queued for 6 seconds)

439f081b

1 related merge request: !1 P3421 Doronin posix

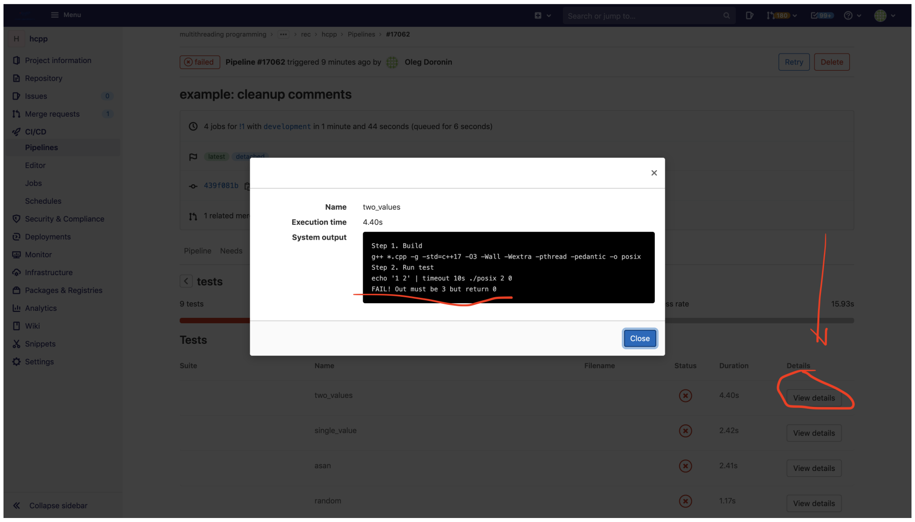
Summary

12 tests 8 failures 0 errors 33.33% success rate 24.73s

Jobs

Job	Duration	Failed	Errors	Skipped	Passed	Total
build	8.80s	0	0	0	2	2
builtin_tests	0.08ms	0	0	0	1	1
tests	15.93s	8	0	0	1	9

5. After that, select a group of tests and in this group you can select a specific bad test and view detailed information for it



Pipeline #17062 triggered 9 minutes ago by Oleg Doronin

example: cleanup comments

4 jobs for !1 with development in 1 minute and 44 seconds (queued for 6 seconds)

439f081b

1 related mer

tests

9 tests

ss rate

15.93s

Name two_values

Execution time 4.40s

System output

```
Step 1. Build
g++ *.cpp -g -std=c++17 -O3 -Wall -Wextra -pthread -pedantic -o posix
Step 2. Run test
echo '1 2' | timeout 10s ./posix 2 0
FAIL! Out must be 3 but return 0
```

Tests

Suite	Name	Filename	Status	Duration	Details
	two_values		⊗	4.40s	View details
	single_value		⊗	2.42s	View details
	asan		⊗	2.41s	View details
	random		⊗	1.17s	View details