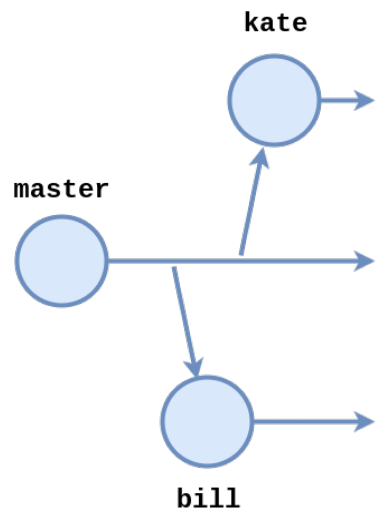


Предсказание конфликтов при merge

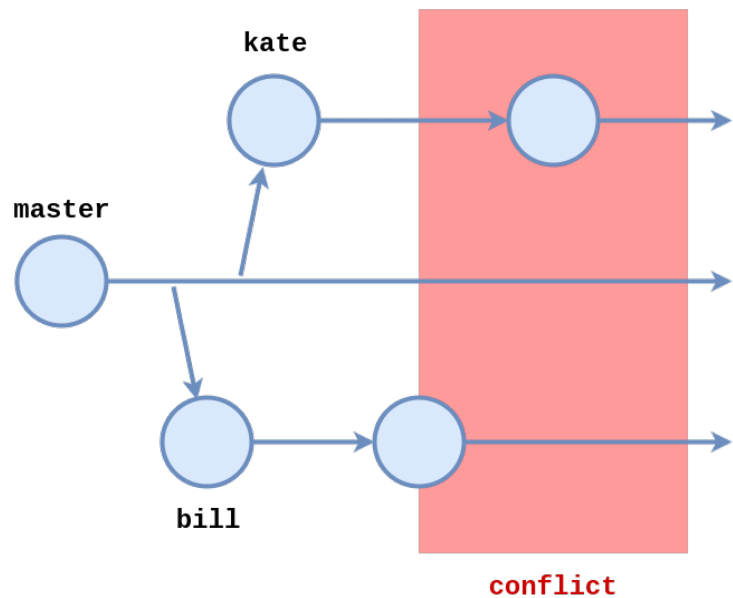
Явейн Анна

Руководитель: Марат Ахин

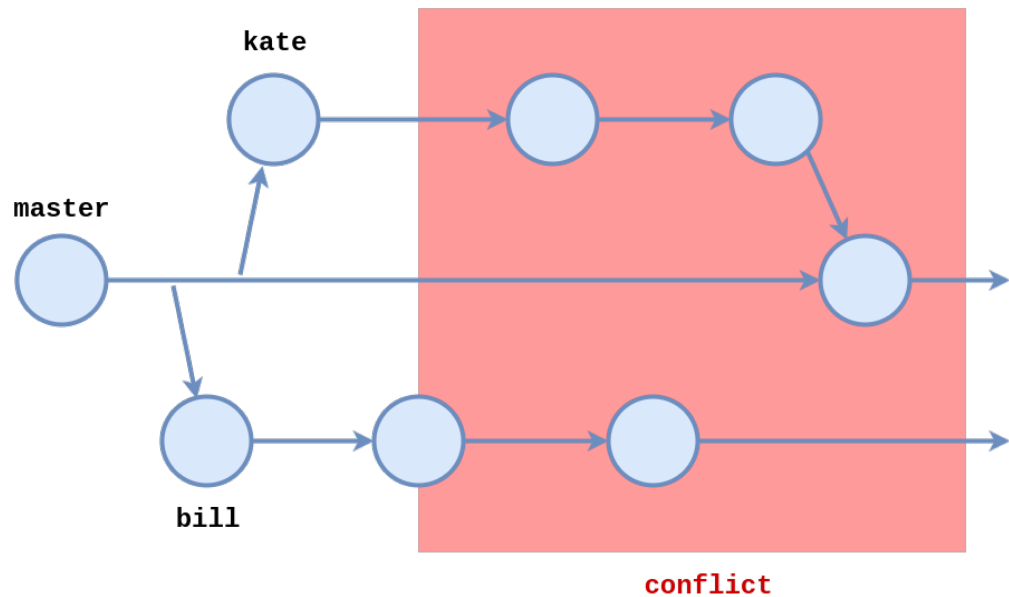
Пример конфликта



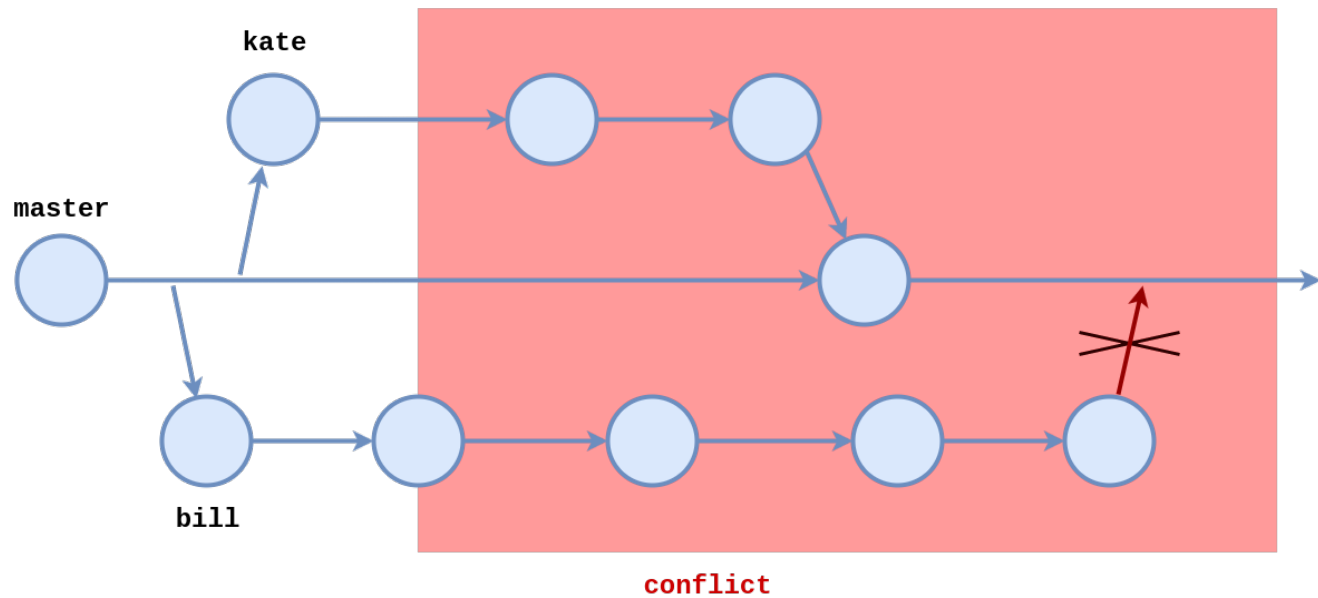
Пример конфликта



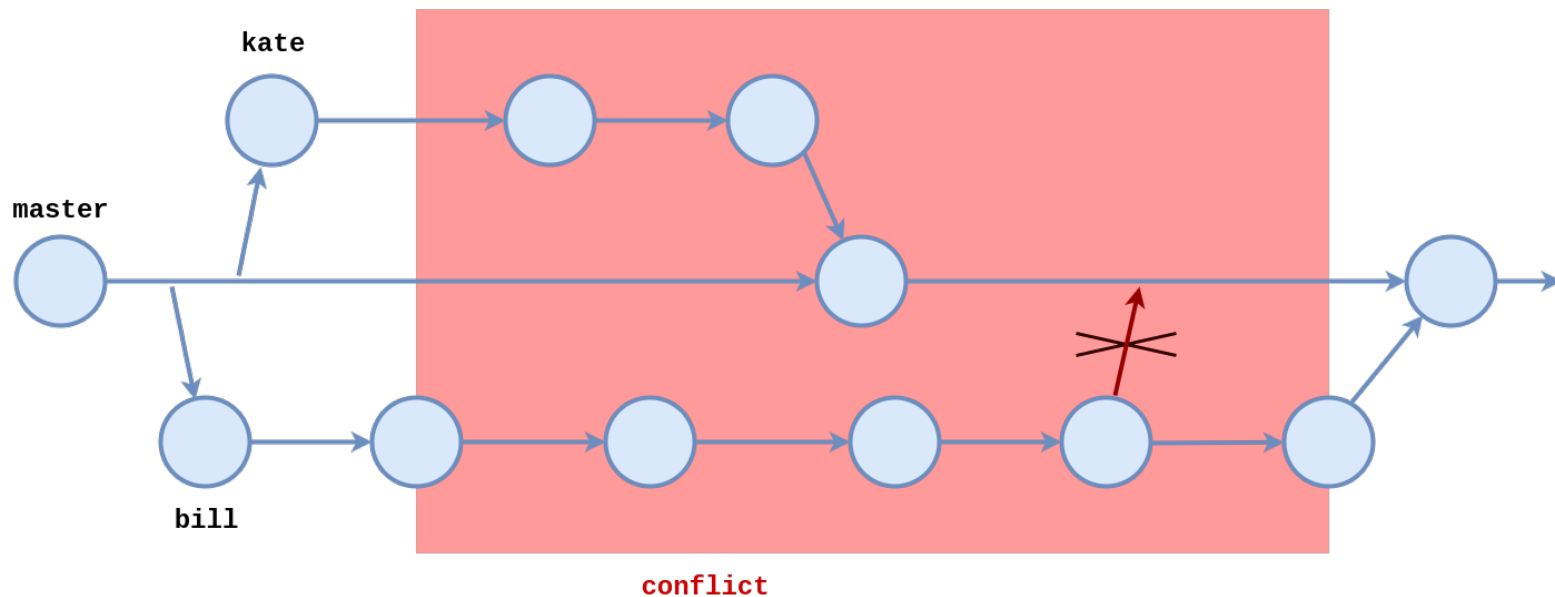
Пример конфликта



Пример конфликта



Пример конфликта



Хочется

Чтобы информация о конфликтах была как можно

- раньше
- больше
- точнее

Типы конфликтов

- **ТЕКСТОВЫЙ**
- **build**
- **test**

Как реализовывать?

- самостоятельный продукт
- плагин для GitLab
- плагин для Teamcity

Как реализовывать?

- **самостоятельный продукт**
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Реализация

New Build Step


Runner type:

Merge Conflict Checker

Checks for merge conflicts.

Step name:

Optional, specify to distinguish this build step from other steps.

Execute step: 

If all previous steps finished successfully

Specify the step execution policy.

Branches:

master evil nonexistent

Branches to check with.

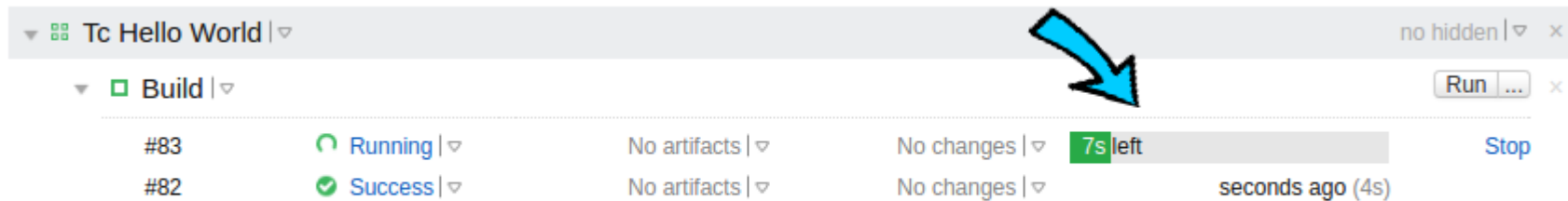
 Hide advanced options

Save

Cancel



Реализация



The screenshot displays a CI/CD interface with a header bar for a project named "Тс Hello World". Below the header, a "Build" section is expanded, showing a list of build steps. The first step, labeled "#83", is in a "Running" state and has a progress bar indicating "7s left". A blue arrow points to this progress bar. The second step, labeled "#82", is in a "Success" state. The interface also includes a "Run ..." button and a "Stop" button.

Build ID	Status	Artifacts	Changes	Progress	Time	Action
#83	Running	No artifacts	No changes	7s left		Stop
#82	Success	No artifacts	No changes		seconds ago (4s)	


Реализация

[Overview](#) [Changes](#) [Build Log](#) [Parameters](#) [Artifacts](#) **Merge Conflict Checker Report**

Branch	Merge status
master	Already-up-to-date
evil	Conflicting
nonexistent	Branch does not exist

Реализация

```
[07:43:12] [x] Finalize build settings
[07:43:17] The build is removed from the queue to be prepared for the start
[07:43:17] [x] Collecting changes in 1 VCS root (1s)
[07:43:18] Starting the build on the agent Default Agent
[07:43:18] Clearing temporary directory: /home/bronti/opt/JetBrains/TeamCity/buildAgent/temp/buildTmp
[07:43:18] [x] Publishing internal artifacts
[07:43:18] Checkout directory: /home/bronti/opt/JetBrains/TeamCity/buildAgent/work/8cab217b2c0ecc26
[07:43:18] [x] Updating sources: auto checkout (on agent) (2s)
[07:43:20] [x] Step 1/1: Merge Conflict Checker
[07:43:21] [x] [Step 1/1] Publishing artifacts
[07:43:21] [Step 1/1] Starting: /home/bronti/opt/JetBrains/TeamCity/buildAgent/temp/buildTmp/simple_build1712431808955958518.tmp
[07:43:21] [Step 1/1] in directory: /home/bronti/opt/JetBrains/TeamCity/buildAgent/work/8cab217b2c0ecc26
[07:43:21] [Step 1/1] Successfully fetched origin
[07:43:21] [Step 1/1] Merge with branch 'master' is successful. Status is Already-up-to-date.
[07:43:21] [Step 1/1] Merge with branch 'evil' is failed. Status is Conflicting.
[07:43:21] [Step 1/1] Branch 'nonexistent' not found
[07:43:21] [Step 1/1] Process exited with code 0
[07:43:21] [x] Publishing internal artifacts
[07:43:22] Build finished
```



Инструменты

- **TeamCity**
- **JGit**
- **Java Spring Framework**
- **AngularJS + Java Server Pages**

Спасибо за внимание.

<https://github.com/bronti/mergeConflictCheckerPlugin>