

Automatic JIRA ticket creation on post-commit tests failure

Status: Complete

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Objective

Design a solution for automatic JIRA ticket creation on post-commit tests failure. This covers action item from [Keeping post-commit tests green](#) proposal.

Non-objective

Choose specific solutions to unify test results reporting for different languages.

Background

In current Beam world, post-commit tests are red for prolonged periods of time. This creates burden on development process. We want to get to the state when post-commit tests are green most of the time and failures are treated promptly.

To help us track the progress, it was decided to automatically create tickets in JIRA for failing post-commit tests.

Requirements

JIRA tickets are automatically created for failing tests.
Duplicate tickets are not created in case if same test is failing again.

Proposal

Utilize [JiraTestResultsReporter-plugin](#) that is default solution for Jenkins integration of test failures reporting to JIRA. New tickets to be created under dedicated “test-failures” component.

Pros:

- This is default solution for Jenkins that suits most of our needs.
- Configurable message that allows insertion of failing test information including error text.

Cons:

- Dependency on Infra team: JiraTestResultsReporter plugin is not installed in our current instance of Jenkins. We will have to contact Infra team to request installation of this plugin.
- JiraTestResultsReporter-plugin utilizes JUnit test results report plugin. This means that our Python and Go projects should report test results in JUnit compatible format.
 - This is negated by the fact that there are ready-made solutions to solve this.
Examples: [for python](#), [for Go](#).

Other options to consider:

- Implement own solution for reporting test results utilizing
 - Yifan Zou sent a [proposal](#) to automate creation of tickets for tracking dependency upgrades that might also require implementation of custom script.

Action items

- File request to Infra team to install JiraTestResultsReporter plugin. Should be done by committer.
- Configure jobs to report test failures to JIRA.

Links

- [Keeping post-commit tests green](#)
- [JiraTestResultReporter-plugin](#)
- [Tracking Beam Dependency Upgrades](#)