Bitbucket Push And Pull Request Plugin

Plugin Information
View Bitbucket Push and Pull Request on the plugin site for more information.

ⓘ **Requirements**

1) This plugin requires a Jenkins v2.138.2 or later and supports

- Bitbucket Cloud rest api v2.x+ and later
- Bitbucket Server 5.14+ and later

2) This plugin will not work if the previous Bitbucket plugin (https://plugins.jenkins.io/bitbucket) is installed.

3) **warning:** After updating the plugin from a version prior to the 2.x.x, the jobs with a pull request need to be reconfigured, reselecting once again, from the plugin conf. pane, the pull request event, that will trigger the build.

Plugin for Jenkins **v2.138.2 or later**, that triggers builds on Bitbucket's push and pull requests. It's based on the Sazo's fork (https://github.com/sazo /bitbucket-plugin) of the official Bitbucket Plugin (https://plugins.jenkins.io/bitbucket).

The new features introduced by Bitbucket Push and Pull Request are:

- improved support of pushs for Bitbucket Cloud (rest api v2.x+ with git and mercurial) and Bitbucket Server (5.14+ with git)
- support of pull requests for Bitbucket Cloud (rest api v2.x+ with git and mercurial) and Bitbucket Server (5.14+ with git)
- usage of Gson instead of net.sf.json.JSONObject (blacklisted starting from Jenkins 2.102+)
- Introduction of Models and security improvements

This plugin supports:

- **push and pull requests for Bitbucket cloud rest api v2.x+ and later and for for Bitbucket server 5.14+ and later**

Configuration

Before you start...

Bitbucket Push And Pull Request Plugin will not work if the Bitbucket plugin (https://plugins.jenkins.io/bitbucket) is still installed. So, please de-install the previous Bitbucket plugin if you want to use this new one.
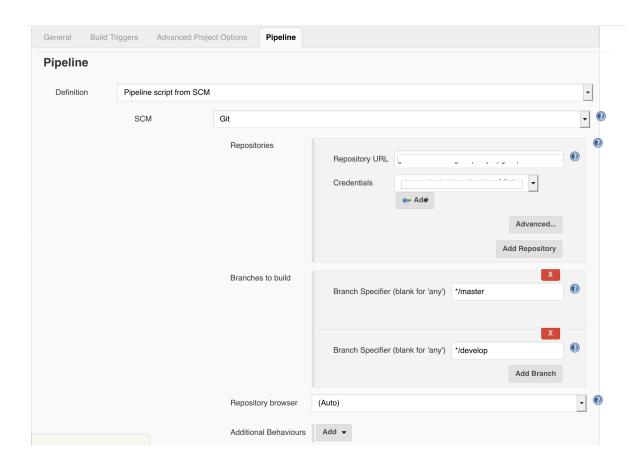
Configure the webhook

In case you are using **Bitbucket Cloud**, configure your Bitbucket repository adding a **webhook in the settings page.** In the URL field (see image, point A) add your JENKINS_URL followed by "/bitbucket-hook/" (for example "https://my-jenkins.on-my-planet-far-away.com/bitbucket-hook/") Credentials for the webhook endpoint are not required, the trailing slash is mandatory. For more infos please consult the resource https://confluence.atlassian.com/bitbucket /manage-webhooks-735643732.html.
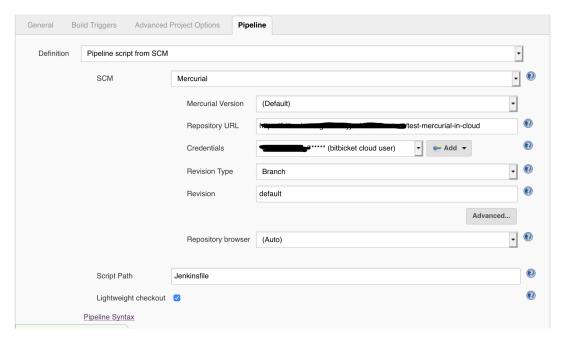
If you are using **Bitbucket Server**, follow these instructions: https://confluence.atlassian.com/bitbucketserver/managing-webhooks-in-bitbucket-server-938025878.html

Configure your Jenkins job

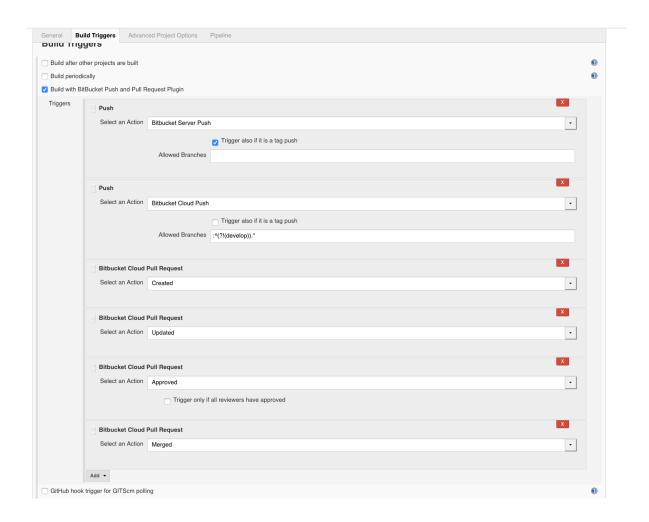1.a. Configure the Bitbucket Repository under the Source Code Management with your credentials. For **git**:

1.b. In case you are using **Mercurial** instead of git, configure it as follows:

Please note: the branch, related to the events which trigger the builds, must be specified in the field Revision.

2. Now activate the plugin in your job selecting the "Build with Bitbucket Push and Pull Request Plugin" option in the Build Triggers pane.

Build Triggers

☐ Build after other projects are built   ⓘ
☐ Build periodically   ⓘ
☑ Build with BitBucket Push and Pull Request Plugin

Triggers

Push   [X]

Select an Action | Bitbucket Server Push | ▾ |

☑ Trigger also if it is a tag push

Allowed Branches | |

Push   [X]

Select an Action | Bitbucket Cloud Push | ▾ |

☐ Trigger also if it is a tag push

Allowed Branches | :^(?!(develop)).* |

Bitbucket Cloud Pull Request   [X]

Select an Action | Created | ▾ |

Bitbucket Cloud Pull Request   [X]

Select an Action | Updated | ▾ |

Bitbucket Cloud Pull Request   [X]

Select an Action | Approved | ▾ |

☐ Trigger only if all reviewers have approved

Bitbucket Cloud Pull Request   [X]

Select an Action | Merged | ▾ |

Add ▾

☐ GitHub hook trigger for GITScm polling   ⓘ

Environment variables

Environment variables for Bitbucket Cloud and Server pull requests

NAME	VALUE
BITBUCKET_SOURCE_BRANCH	source branch
BITBUCKET_TARGET_BRANCH	target branch
BITBUCKET_PULL_REQUEST_LINK	link
BITBUCKET_PULL_REQUEST_ID	id
BITBUCKET_PAYLOAD	payload as json string

Environment variables for Bitbucket Cloud pushs

NAME	VALUE
REPOSITORY_LINK	*branch (Deprecated. It will be removed)*
BITBUCKET_SOURCE_BRANCH	branch
BITBUCKET_REPOSITORY_URL	repository url
BITBUCKET_PAYLOAD	payload as json string

Code snippets

Dsl jobs

```
job('example-pull-request-created') {
        triggers{
                bitbucketPullRequestCreatedAction()
        }
        scm {
            git {
                remote {
                    url("https://git.company.domain/scm/~username/telegram.git")
                }
            }
        }
    steps {
        shell('echo START pull request created')
    }
}

job('example-pull-request-updated') {
        triggers{
                bitbucketPullRequestUpdatedAction()
        }
        scm {
            git {
                remote {
                    url("https://git.company.domain/scm/~username/telegram.git")
                }
            }
        }
    steps {
        shell('echo START pull request updated')
    }
}

// bitbucketPullRequestApprovedAction(boolean onlyIfReviewersApproved)
job('example-pull-request-approved') {
        triggers{
                bitbucketPullRequestApprovedAction(false)
        }
        scm {
            git {
                remote {
                    url("https://git.company.domain/scm/~username/telegram.git")
                }
            }
        }
    steps {
        shell('echo START pull request approved')
    }
}

// bitbucketRepositoryPushAction(boolean triggerAlsoIfTagPush, String allowedBranches)
job('example-push') {
        triggers{
                bitbucketRepositoryPushAction(false, "")
        }
        scm {
            git {
                remote {
                    url("https://git.company.domain/scm/~username/telegram.git")
                }
            }
        }
    steps {
        shell('echo START push')
    }
}
```

Pipeline script

```
properties([
    pipelineTriggers([
        [
            $class: 'BitBucketPPRTrigger',
            triggers : [
                [
                    $class: 'BitBucketPPRPullRequestTriggerFilter',
                    actionFilter: [
                        $class: 'BitBucketPPRPullRequestCreatedActionFilter'
                    ]
                ]
            ]
        ]
    ])
])
node {
        def sourceBranch = ""
        def targetBranch = ""
        try{
            sourceBranch = "${BITBUCKET_SOURCE_BRANCH}";
            targetBranch = "${BITBUCKET_TARGET_BRANCH}";
        }catch(e){}

        if(sourceBranch == ""){
            sourceBranch = 'development'
        }

        if(targetBranch == ""){
            targetBranch = 'master'
        }

        checkout changelog: true, poll: true, scm: [
            $class: 'GitSCM',
            branches: [
                [name: '*/'+sourceBranch]
            ],
            doGenerateSubmoduleConfigurations: false,
            extensions: [
                [
                    $class: 'PreBuildMerge',
                    options: [
                        fastForwardMode: 'FF',
                        mergeRemote: 'origin',
                        mergeStrategy: 'recursive',
                        mergeTarget: ''+targetBranch
                    ]
                ]
            ],
            submoduleCfg: [],
            userRemoteConfigs: [
                [
                    url: 'https://[user]@bitbucket.org/[org]/[repo].git']
                ]
            ]


        echo 'Some build steps'

}
```

Change Log

2.2.0 (2019-10-14)

[Full Changelog](#)

Implemented enhancements:

- Added checkbox to define if changes on the repos have to be confirmed through the git plugin before starting a job triggered by a push
- Added pull request support for Mercurial on Bitbucket Cloud

Merged pull requests:

- #60 change pull request #59 and reformatting by cdelmonte-zg
- #59 adding logic to trigger target branch on merge by raghav-a
- #58 an option for repository hasChange() conditional behaviour by cdelmonte-z
- #55 workflows: implement isPipelineMultibranch check by macghriogair
- #51 Job DSL multiple triggers by rhotau
- #50 Support for multiple triggers from dsl by rhotau

2.0.0 (2019-06-25)

[Full Changelog](#)

Implemented enhancements:

- Added pull request support for Bitbucket Server - Added pull request support for Mercurial on Bitbucket Cloud

Closed issues:

- Issue #44 Branch expression matching before triggering the build: expecting fix for Bitbucket Server bug
- Issue #37 Jenkins build triggered from push event with Mercurial instead of git enhancement

Merged pull requests:

- #49 Add warnings
- #48 [Enhancement] Add pull request support for Bitbucket Server and Mercurial on Bitbucket Cloud

1.6.4 (2019-06-19)

[Full Changelog](#)

Closed issues:

- Issue #38 BITBUCKET$SOURCE$BRANCH has wrong value for repo:push events
- Issue #36 Branch expression matching before triggering the build

Merged pull requests:

- [fix] #47 Develop
- [fix] #46 Improving tests for allowed branches
- [fix] #45 Develop

1.6.3 (2019-06-14)

[Full Changelog](#)

Closed issues:

- Issue #36 Branch expression matching before triggering the build
- Issue #30 Version 1.6.2 throws exception after receiving PR payload bug
- Issue #27 Builds not triggering with 1.6.1 and Bitbucket Server 7.0.1 bug
- Issue #26 Add environment variable for git repository url

Merged pull requests:

- [fix] #41 BranchSpec pattern matching directions (by macghriogair)
- [enhancement] #34 Create CODEOFCONDUCT.md (by eiriarte-mendez)

1.6.2 (2019-05-10)

[Full Changelog](#)

Closed issues:

- Issue #27 Builds not triggering with 1.6.1 and Bitbucket Server 7.0.1 bug

Merged pull requests:

- [Bug] #27 Builds not triggering with 1.6.1 and Bitbucket Server 7.0.1 #28

1.6.1 (2019-05-08)

[Full Changelog](#)

Implemented enhancements:

- added more enviroment variables and improved the documentation abotu them

Closed issues:

- Improvements#24 Add environment variable for pull request id
- Issue#19 Webhook not triggering
- Improvements#11 BITBUCKET_SOURCE_BRANCH is not injected for SCM poll

Merged pull requests:

- [develop] Enhance environment variables #25

1.6.0 (2019-04-29)

[Full Changelog](#)

Implemented enhancements:

- split methods of io.jenkins.plugins.bitbucketpushandpullrequest.BitBucketPPRJobProbe to allow unit tests

Closed issues:

- Improvements#20 Add trigger for pull request merged
- Improvements#14 Pattern for allowed branches
- Improvements#5 Improve support for BitBucket Server push

Merged pull requests:

- [develop] Remove deprecated username field from payload #17 by macghriogair
- [develop] add support for pattern matching on branches #18 by macghriogair
- [develop] Add support for merged pull requests #21 by cdelmonte-zg

1.5.0 (2019-04-11)

[Full Changelog](#)

Implemented enhancements:

- split methods of io.jenkins.plugins.bitbucketpushandpullrequest.BitBucketPPRJobProbe to allow unit tests

Closed issues:

- Improvements#10 add ssh uri matching for git clone
- Improvements#12 No change-logs or description of features
- Improvements#5 Improve support for BitBucket Server push

Merged pull requests:

- [dev] gitignore more project specific entries #13 by macghriogair

Issues

Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution
JENKINS-60602	Bitbucket integration with Jenkins	✓	Dec 29, 2019	Jan 15, 2020		Christian Del Monte	Alex Martynenko	↑	REOPENED	Unresolved

JENKINS-60418	issue of Integration webhook with bitbucket when using bitbucket pull and push plugin	🟧	Dec 10, 2019	Jan 13, 2020	Christian Del Monte	vikas goyal	⊘	CLOSED	Cannot Reproduce
JENKINS-60032	issue with bitbucket pull and push request plugin	🟧	Nov 04, 2019	Dec 10, 2019	Christian Del Monte	vikas goyal	⊘	FIXED BUT UNRELEASED	Fixed
JENKINS-59808	Jenkins PR(pull request) build fails for 1st time	🟧	Oct 16, 2019	Jan 13, 2020	Christian Del Monte	tanzeel rehman	↑	CLOSED	Not A Defect
JENKINS-58607	Problem configuring BitBucket Push and Pull Request Plugin	🟧	Jul 22, 2019	Jan 13, 2020	Christian Del Monte	Renat Kabirov	⌃	CLOSED	Not A Defect
JENKINS-55896	Jenkins is not triggering build on any pullrequest created in bitbucket repo	🟧	Jan 31, 2019	Jun 20, 2019	Christian Del Monte	Hassaan Sohail	⊘	CLOSED	Fixed

6 issues