How to integrate GitHub Enterprise Cloud account with Jira software?

Problem Description

The user wants to integrate GitHub Enterprise Cloud (GHEC) with Jira.

Resolution

Overview

The users can integrate their GitHub Enterprise Cloud account with Jira Cloud to get quick access to branches, commits and pull requests in the context of Jira Software issues being worked upon. This increases the efficiency during planning and stand-up meetings. The following article describes how to set up this linking.

Pre-requisites

Make sure the connection between your GitHub Enterprise Cloud repositories and Jira Cloud account is working fine by checking the **Development section** of Jira issue on the left-hand side pane. If the Development section comprise of 3 subparts- **Branch, Commit and Pull requests** then the connection is enabled. If none of these subparts are present then user should raise a Incident Request through ServiceNow, refer to [this article](#) to raise request.

Note: The development section comes only for Jira Software projects.

Steps to be followed

Part A: Create a Branch on Git Repository

1. Open Jira and open an existing Jira issue or create a new issue.

   *Note: Pay attention to the **Key** of Jira issue.*

2. After opening a specific issue, go to **Create branch** option in Development section on left hand side pane. Git command to create a branch will pop up, use this command in command line to create the required branch. Please remember to use the Key of that specific Jira issue as a part of the branch name for integration to work, this is very important step.

   *git checkout -b <**branch name including Jira issue Key as substring**>*

For example: If the Jira issue is having key- GHEC-4, then the commands can be

```
git checkout -b branch1-GHEc-4
git checkout -b branch_xyz_GHEC-4-feature-abc
```

*Note: Make sure to clone the Git repository on local machine using **git clone** command before*
*running **git checkout** command. After git checkout command, use **git push** command.*

3. The branch count will be updated under Development section of Jira issue, clicking on branch will give further details of the linked Git repository.

4. Create a branch from Jira ticket by clicking on the small square right hand side of **Create branch.** Add **Repository,** and **Branch name** as shown below.

Then Bitbucket branch is linked to development tab as shown below.

Development JCSAAS-290

Branches   Commits   Pull requests   Builds   Deployments   Feature flags   Other links **BETA**

Repository	Branch
⭕ TEST	⑂ JCSAAS-290-jira-bitbucket-oauth-integration-testing

5. Commit code with issue key in the comment, links to the Jira ticket and Development Tab.

DevOps Tools / TEST

Commits

⑂ JCSAAS-290-jira-bitbucket-... ⌄   ···

	Author	Commit	Message	Commit date
≪	Tsang, Pang Chung	9dace6085b5	JCSAAS-290 initial code	A moment ago
	Chau, Thomas	1549b417dcb	a.x edited online with Bitbucket d	22 Aug 2022
	Chau, Thomas	928c4b8995b	init	22 Aug 2022

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Jira / Bitbucket Oauth integration testing

📎   🗐   🔗   ···

To Do ⌄

Description

Add a description...

Details ^

Assignee

PT   Pang Chung Tsang

Reporter

PT   Pang Chung Tsang

Activity

Show: Comments ⌄   Newest first ⬇

Development

1 branch

PT   Add a comment...

1 commit   9 seconds ago

Pro tip: press **M** to comment

⑂ **Create pull request**

Development JCSAAS-290　　　　　　　　　　　📢 Give feedback ✕

Branches　**Commits**　Pull requests　Builds　Deployments　Feature flags　Other links BETA

⬡ **TEST** (BMO Enterprise Bitbucket)　　　　　　　　　　　　**Show all files**

Author	Commit	Message	Date	Files
👤	9dace6085b5	JCSAAS-290 initial code	2 minutes ago	1 file

6. Commit code with message **<issue key> #comment <comment>**as descibed, then Comment will be automatically added to the Jira ticket as shown.

DevOps Tools / TEST

Commits

⅋ JCSAAS-290-jira-bitbucket-... ⌄ ...

Author	Commit	Message	Commit date
Tsang, Pang Chung	6045bac69fe	JCSAAS-290 #comment auto comment jira ticket	A moment ago
Tsang, Pang Chung	9dace6085b5	JCSAAS-290 initial code	4 mins ago
Chau, Thomas	1549b417dcb	a.x edited online with Bitbucket d	22 Aug 2022
Chau, Thomas	928c4b8995b	init	22 Aug 2022

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Jira / Bitbucket Oauth integration testing

📎 ☑ 🔗 ...

Description

Add a description...

Activity

Show: Comments ⌄   Newest first ↓≡

PT   Add a comment...

Pro tip: press M to comment

PT **Pang Chung Tsang** 1 minute ago
auto comment jira ticket

Edit · Delete · ☺

To Do ⌄

Details ⌃

Assignee
PT Pang Chung Tsang

Reporter
PT Pang Chung Tsang

Development
1 branch

2 commits   20 seconds ago

🖇 Create pull request

Labels
None

Start date   💡 Quickstart ✕
None

7. Commit code with message **<issue key> #time <time>.** Smart Commit is created, and work will be logged to the Jira ticket.

8. To perform smart commit with transition, create PR and comment the PR with message **<issue key> #transition.** As a result, PR will be linked to the Jira ticket and the ticket will be moved to expected state.

1. Completion of the workflow transition changes the ticket status to **Done.**
2. #comment in the message will be processed and added to the ticket comment.
3. All PR with the ticket number will be listed including previous declined PR.

JCSAAS-290-jira-bitbucket-oauth-integration-testing → master **MERGED** ...

JCSAAS-290 jira bitbucket oauth integration testing #Done #comment issue fixed

Overview Diff Commits Builds

Tsang, Pang Chung created a pull request 2 mins ago

- JCSAAS-290 initial code
- JCSAAS-290 #comment auto comment jira ticket
- JCSAAS-290 #time 2d #comment update core code

Activity

What do you want to say?

Tsang, Pang Chung **MERGED** JCSAAS-290-jira-bitbucket-oauth-integration-testing to master in commit 957c5cac8e2 1 min ago

Tsang, Pang Chung **OPENED** the pull request 2 mins ago

Development JCSAAS-290   📣 Give feedback ✕

Branches Commits **Pull requests** Builds Deployments Feature flags Other links BETA

ID	Title	Status	Author	Reviewer	Last updated
3	JCSAAS-290 jira bitbucket oauth integration testing #Do...	MERGED			2 minutes ago
2	JCSAAS-290 jira bitbucket oauth integration testing #DO...	DECLINED			3 minutes ago
1	JCSAAS-290 jira bitbucket oauth integration testing #clo...	DECLINED			5 minutes ago

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Jira / Bitbucket Oauth integration testing

📎 Attach   ☑ Create subtask   🔗 Link issue   ∨   ...

| **Done** ∨ | ✓ Done |

Description

Add a description...

Activity

Show: **All** Comments History Work log   Newest first ⬇

PT Pang Chung Tsang changed the Status 27 seconds ago HISTORY

TO DO → DONE

PT Pang Chung Tsang updated the Resolution 27 seconds ago HISTORY

None → Done

PT Pang Chung Tsang added a Comment 28 seconds ago COMMENTS

issue fixed

Details ^

Assignee
PT Pang Chung Tsang

Reporter
PT Pang Chung Tsang

Development
1 branch

4 commits   9 seconds ago

1 pull request   MERGED

Labels
None

Start date
None

Part B: Commit code linking to a Jira Issue

1. Open the linked GitHub repository by clicking on *branch* from the Development section on the left hand side pane of the Jira issue.
2. Click on *Commits* beside Branches to check if there are any prior commits.
3. Go to branch of GitHub repository where you want to make a commit.

4. Do the code changes by editing the files in the selected branch and scroll down to Commit changes section. While filling in the *Update Commit-test field*, make sure to include the *Key* of Jira issue as substring and click Commit changes button.

   Note: Below Update Commit-test field there is a field to add optional extended description. Even if the *Key* is added as substring in *optional extended description* only, then also the commit will get linked to the Jira issue.

5. Go to the Development section of Jira issue, the count of commit will be updated.
6. Click on *Commit* in Development section of the Jira issue and a pop-up reflecting the recent commit will open. The commit is now linked with the Jira issue and can be accessed by clicking on *commit hash*.

Part C: Creating Pull Request on Git Repository using Jira

1. Click on *Create pull request* in Development section of the Jira issue and a drop-down reflecting branches will come. Select the branch that you want to create a pull request on. In case there is already a pull request in place then use "*plus*" button to create next new pull request.
2. You will be directed to *Open a pull request* page of the GitHub repository.
3. Click on *Create pull request* button on right, the panel will expand. In the *Title* field, make sure to enter the *Key* of the Jira issue and then again click on *Create pull request* button.
4. The pull request is created and linked with the Jira issue. Under the *Development section* of the Jira issue pull request will be updated with current Status as *Open.*
5. Now, open the pull request from Jira by clicking on pull request *Title* and merge or decline the request in GitHub. Depending on the GitHub operation, the pull request status gets updated to *Declined* or *Merged.*