ALM Octane

Git Integration Tool

User Guide

Document Release Date: September 2019

Introduction

This tool can be used in order to fetch pull requests from Git repositories into Octane.

> **Note:** Only Bitbucket is supported at the moment.

Limitations

- This solution can be used for one instance of Octane with multiple shared spaces and workspaces. In case you desire to use this utility on more than one Octane instance, you will need to reinstall the utility for each instance.

- In the current version we support only one Bitbucket instance connected to an Octane instance. Multiple repositories and projects from that instance of Bitbucket can be connected to Octane.

- In order to fetch the pull requests correctly, the commits data must be present in Octane, not only in the repository.

- If the configuration file (**\conf\configuration.properties**) is modified, the server must be restarted.

Prerequisites

One instance of each application below is required for the integration:

- Octane – Version 12.60.47 and higher
- Bitbucket – Version 5.16 and higher

One of the following web servers:

- Tomcat – Version 7.0 and higher
- Jetty – Version 9.4.20 and higher

Deployment

In order to install the tool, you will need the **git-integration-for-octane.war** file and a java web application server such as Tomcat/Jetty, where the artifact can be deployed to.

Please follow the steps below after adding the war to your web server (Tomcat/Jetty):

1. Fill in the configuration file, **configuration.properties**, which can be found in the **\conf** folder.

Key	**Value**
Octane Fields	
octane.server	The **URL** to the Octane server. Example: `http://octane.company.com:8080`
octane.sharedSpace	The shared spaces of Octane where the utility will be used. The shared spaces must be separated by a comma. Example: `1001,1002`

octane.user	A username (or API key) which has **Space Admin** and **Workspace Admin** permissions. If the utility is used for more than one shared space, you should add a username (or API key) for each shared space separated by a comma. Please pay attention because the order matters. Example: user1,user2
octane.password	The password (or Secret) for the user. If there are multiple users listed, all the passwords must be provided in the same order. Example: password1,password2
octane.udfName	In order to display the pull requests, the utility will create a memo field. The name of the field must have "_udf" at the end. Example: pull_requests_udf
octane.udfLabel	The name of the field. This is what users will see in the entities Edit form. Example: Pull Requests
Bitbucket fields	
repo.host	The only supported value for this field at the moment is **bitbucketserver**.
bitbucketserver.url	The Bitbucket URL. Example: `http://bitbucket.com:7990`
bitbucketserver.access	A Bitbucket Personal access token. Here you can find out how to create an access token for Bitbucket.
Proxy fields (Optional)	
proxy.host	The proxy host.

	Example: `webcache.example.com`
proxy.port	The proxy port. Example: 8080

> **Note:** Please pay attention to enter the shared spaces and credentials in the correct order!
>
> **Example:** user1 with password1 is Space Admin in the Shared Space 1001 and user2 with password2 is Space Admin in the Shared Space 1002. The correct values can be:
>
> octane.sharedSpace=1001,1002
> octane.user=user1,user2
> octane.password=password1,password2
>
> OR
>
> octane.sharedSpace=1002,1001
> octane.user=user2,user1
> octane.password=password2,password1

2. Add the Get Pull Requests button to Octane.
    a. Login to Octane with a Site Admin user.
    b. Click on the **Settings** icon.
    c. Go to **External action editor**. You can find help about this feature here. All the used attributes are explained in the Help Center.

This example JSON can be used to create the button. The only thing which must be replaced is the highlighted first part of the Tomcat/Jetty URL (for example **`http://localhost:9090/git-integration-for-octane`**).

Example:

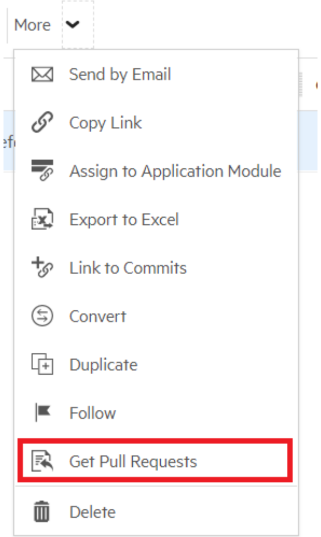
```
[ {
    "name": "pull_requests_button",
    "title": "Get Pull Requests",
    "entity_type": ["work_item"],
    "views": ["list", "details"],
    "icon": "import",
    "url": "http://localhost:9090/git-integration-for-octane/pull-requests?ids={entity_ids}&entityType={entity_type}&sharedSpace={shared_space}&workSpace={workspace}&dialogId={dialog_id}&server={octane_url}",
    "single_entity": false,
    "events": true,
    "dialog": "small"
}]
```

Some of these attributes, i.e. name or title, can be modified. Please follow the instructions from the Help Center before modifying any of the attributes' values.

d. After adding this JSON (with the updated URL) in the External action editor, you need to press **UPDATE** so that Octane will add the button to the entities actions menu.

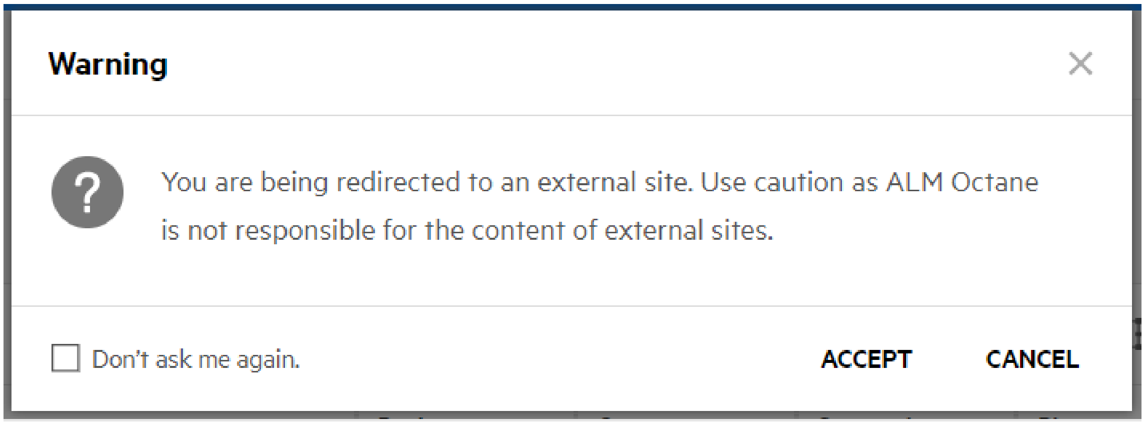
e. Refresh Octane.

Now the button should be available in the entities action menu if you select at least one entity, on the detailed view, Backlog or Team Backlog views, as below:



First time usage

Once you have your commits data from Bitbucket brought into Octane, you can start using the tool. You can select all the entities and press the "**Get Pull Requests**" button. For the first time, Octane will display this message:

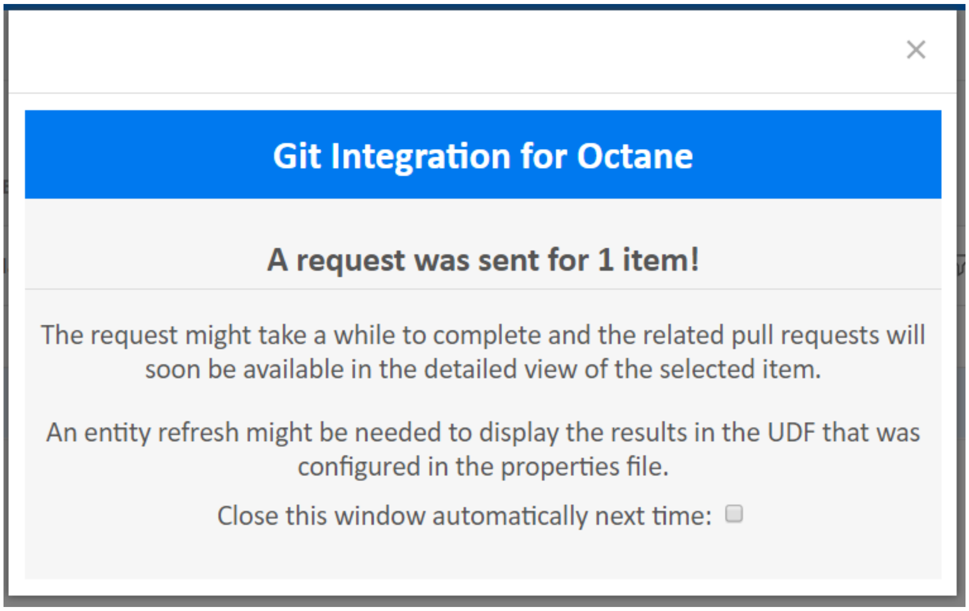


Warning

You are being redirected to an external site. Use caution as ALM Octane is not responsible for the content of external sites.

This is because the Get Pull Requests button, which was just added to Octane, fires a request to the middleware. If you don't want to see this pop up every time you click the button, you can check the "**Don't ask me again**" checkbox.

For every call (button press), the middleware will display the following content:



Git Integration for Octane

A request was sent for 1 item!

The request might take a while to complete and the related pull requests will soon be available in the detailed view of the selected item.

An entity refresh might be needed to display the results in the UDF that was configured in the properties file.

Close this window automatically next time: □

If the checkbox is selected, this window will automatically close after 4 seconds and the detailed view of the entities will be refreshed.

> **Note:** The content of the window will not change in case there are any errors or delays. The calls to fetch the pull requests are done while this message is displayed. In case of any latencies please check the logs (\git-integration-for-octane\logs) for errors or warnings.

The middleware will perform the following actions when the button is pressed for the first time:

1. For epics, features, defects, user stories and quality stories, the memo UDF (where the pull requests will be listed) will be created.

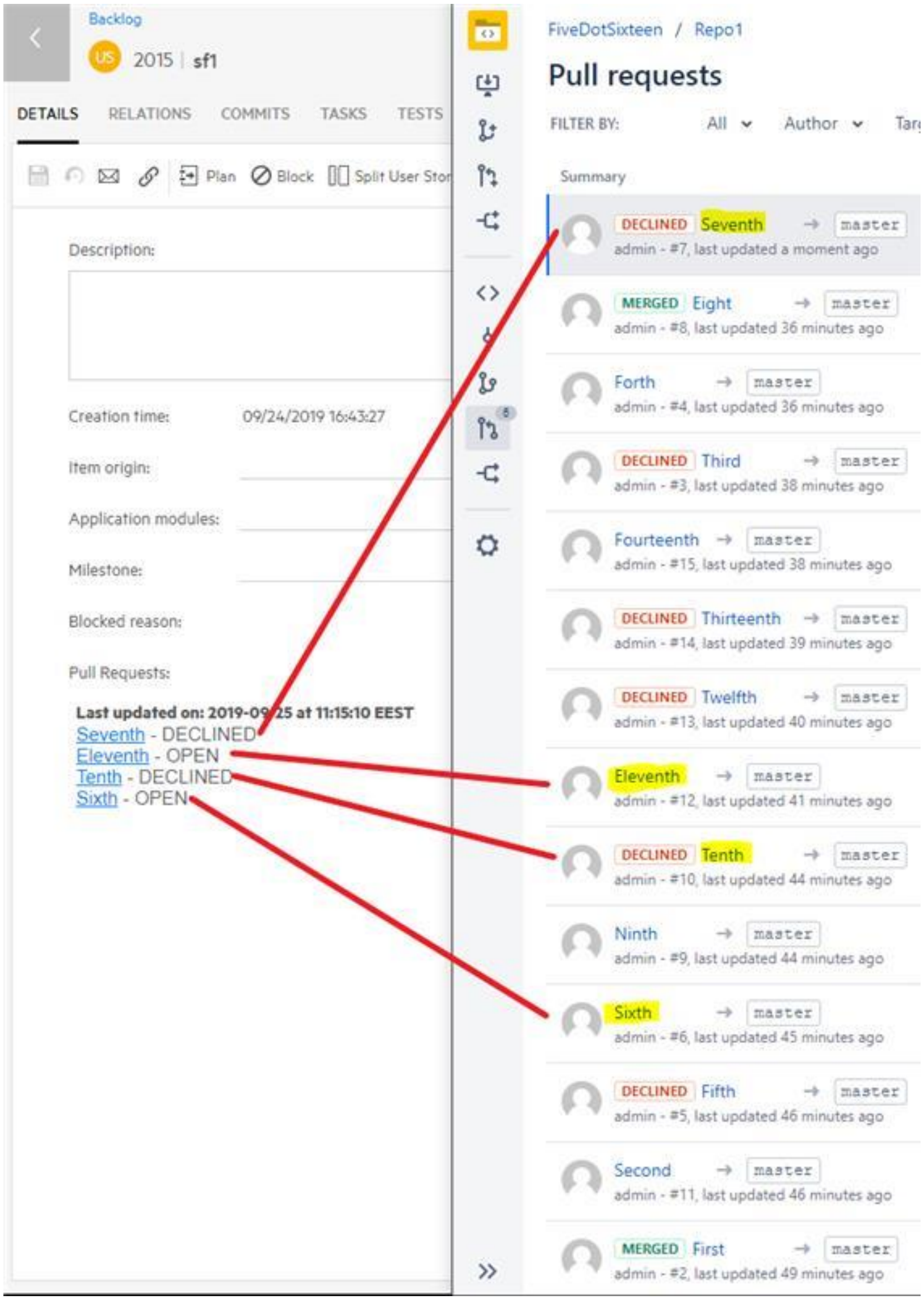
2. The UDF will be added into the Edit form for every entity listed above. This means that users will see the UDF when they edit an entity.

3. A new rule will be added, in order to make the UDF read only. This rule will be created for all the entities mentioned above.

   The rule makes the UDF read-only for all the users, except the ones with Space Admin permissions.

For Isolated Spaces, the items mentioned above will be created at workspace level. For Shared Spaces, the items will be created in the master workspace and inherited in the rest of the workspaces.

After all the operations are completed the pull requests links and states will be entered into the memo UDF. The pull requests are ordered as they are in Bitbucket, last updated first.



Description:

Creation time: 09/24/2019 16:43:27

Item origin:

Application modules:

Milestone:

Blocked reason:

Pull Requests:

Last updated on: 2019-09-25 at 11:15:10 EEST
Seventh - DECLINED
Eleventh - OPEN
Tenth - DECLINED
Sixth - OPEN

FiveDotSixteen / Repo1

Pull requests

DECLINED Seventh → master
admin - #7, last updated a moment ago

MERGED Eight → master
admin - #8, last updated 36 minutes ago

Forth → master
admin - #4, last updated 36 minutes ago

DECLINED Third → master
admin - #3, last updated 38 minutes ago

Fourteenth → master
admin - #15, last updated 38 minutes ago

DECLINED Thirteenth → master
admin - #14, last updated 39 minutes ago

DECLINED Twelfth → master
admin - #13, last updated 40 minutes ago

Eleventh → master
admin - #12, last updated 41 minutes ago

DECLINED Tenth → master
admin - #10, last updated 44 minutes ago

Ninth → master
admin - #9, last updated 44 minutes ago

Sixth → master
admin - #6, last updated 45 minutes ago

DECLINED Fifth → master
admin - #5, last updated 46 minutes ago

Second → master
admin - #11, last updated 46 minutes ago

MERGED First → master
admin - #2, last updated 49 minutes ago

Troubleshooting

By default, the middleware does not display any errors.

In the **git-integration-for-octane\logs** folder, all the logs of the application are available. In case of any errors or latencies please check the logs for ERROR and WARNING messages.

Feedback

This is our GitHub page. Please feel free to share your feedback and suggestions with us there.