

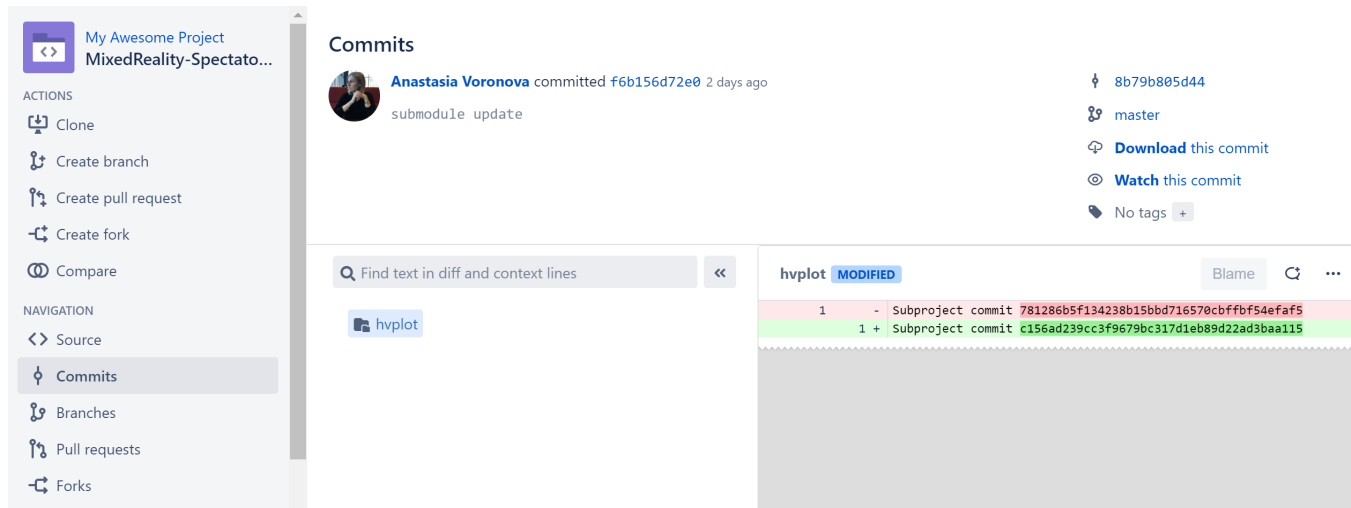
# Submodule Changes for Bitbucket

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## What is this add-on for?

**Submodule Changes for Bitbucket** helps visualize modified lines of code in commits and pull requests for repositories with submodules.

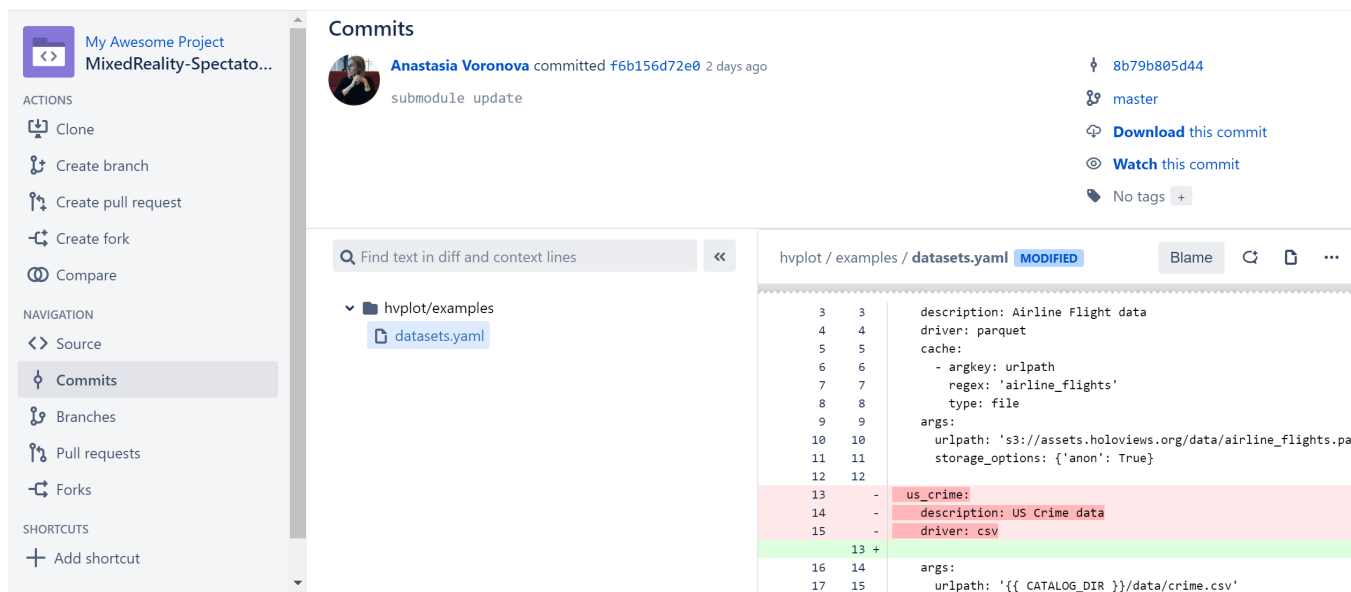
While working with Git submodules, there's a common problem with showing changes that are made to the submodule in the **Diff** tab. It displays two commit hashes instead of actually modified files and LOC. It's especially inconvenient when it comes to reviewing pull requests.



The screenshot shows the Bitbucket interface for a repository named "My Awesome Project" (MixedReality-Spectato...). The left sidebar contains navigation links: ACTIONS (Clone, Create branch, Create pull request, Create fork, Compare) and NAVIGATION (Source, Commits, Branches, Pull requests, Forks). The main content area displays a commit by Anastasia Voronova, committed 2 days ago, with the message "submodule update". The commit hash is f6b156d72e0. The diff view shows a change in the hvplot submodule, with a table of changes:

Line	Change	Subproject	Commit
1	-	Subproject	commit 781286b5f134238b15bbd716579cbffbf54efaf5
1	+	Subproject	commit c156ad239cc3f9679bc317d1eb89d22ad3baa115

**Submodule Changes for Bitbucket** app helps watch changes committed to a submodule in a standard Bitbucket **Diff** view as if they're committed to the s uper-repository. It also gives an ability to watch **Blame** leave comments for more convenient pull requests review.



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The diff view also shows a detailed view of the datasets.yaml file, with a table of changes:

Line	Change	Subproject	Commit
3	3		
4	4		
5	5		
6	6		
7	7		
8	8		
9	9		
10	10		
11	11		
12	12		
13	-	us_crime:	
14	-	description: US Crime data	
15	-	driver: csv	
13	+		
16	14		
17	15		

**Submodule Changes for Bitbucket** also gives an ability to watch **Blame**, leave **comments** on the entire pull request, a particular file, or on specific lines of code in a file for more convenient pull requests review.

Administrator
feature-AWEGRAPHS-717 → master
OPEN
Merge
...

## added team feature

Overview
Diff
Commits

Show diff of
<<

All changes in this pull request

Files

- hvplot
  - conda.recipe
    - meta.yaml
  - hvplot
    - networkx.py

hvplot / hvplot / networkx.py
Blame

MODIFIED

```

1 1 from collections import defaultdict
2 2
3 3 import numpy as np
4 4 import networkx as nx
5 5 import holoviews as _hv
6 6
7 - from bokeh.models import HoverTool

```

Look! Now i can watch leave comments on a pull request with submodule update. Awesome 😄

Edit

There are several exceptions when the app doesn't show changes committed to a submodule:

- When a submodule is placed not in the current Bitbucket instance
- When a submodule is just added or deleted in shown changes
- When there is a submodule conflict

**Submodule Changes for Bitbucket** includes a merge check **Submodules fast-forward merge** to ensure that all submodules can be merged to the default branch in fast-forward mode. If we didn't merge the submodule before merging the super-repository, we'd be able to do it afterward in fast-forward mode, and the link to the submodule will remain unchanged.

Merge-check must first be enabled in the project or repository settings.

Merge check restrictions:

- Merge check is performed only at the first level of a submodule, and nested submodules will not be checked
- Merge check only works for submodules hosted in Bitbucket it's been enabled in
- Merge check may skip submodules that are a part of truncated changes when the changes list is too big to be shown

## How to install and configure the app?

To install **Submodule Changes for Bitbucket**, log into your Bitbucket Server as Administrator and install **Submodule Changes for Bitbucket** [directly from Atlassian Marketplace](#) or by [file upload](#).

The app doesn't require any configuration. Once installed, the changes apply to the Diff tab for commits and pull requests with updates to a submodule.

## How to turn off the app for a certain submodule?

In some cases, the number of changes in a pull request with a submodule can exceed the [page.max.changes limit](#). For instance, when a dependency on some large project is used as a submodule. That resulted in an incomplete displaying of changes in the pull request diff view.

To disable the **Submodule Changes for Bitbucket** app for a specific submodule in a repository, you need to add a special property in the **.gitmodules** file using the following Git command:

```
git config --file .gitmodules submodule.<name>.ignoreChanges true
```

In this command, **<name>** is the submodule name specified in the **[submodule "<name>"]** section of the **.gitmodules** file. The changes will be applied after you commit and push them.

Ex.: if you have a submodule named "library", the .gitmodules file will be the following:

```
[submodule "library"]
path = library
url = https://bitbucket.company.com/scm/sm/library.git
```

In this case, your command that will turn off the app for this submodule will be:

```
git config --file .gitmodules submodule.library.ignoreChanges true
```

As a result, the .gitmodules file will change like this:

```
[submodule "library"]
path = library
url = https://bitbucket.company.com/scm/sm/library.git
ignoreChanges = true
```