

# eGit-Extension : An extension to github mylyn connector

## Introduction

GitHub has created a revolution in the product development world by enabling the idea of “Social Coding” with distributed, virtual community, dispersed and diverged geographically.

Eclipse has also adopted to move towards Social Coding by moving its source code into GitHub and GitHub with the support of the Eclipse Committers even wrote a Java API to integrate with Mylyn called as EGit Mylyn Github Connector. This plugin enables Eclipse developers to integrate with Issues, Gists and PullRequests raised in Github from their Mylyn Task List.

eGit-Extension is an extended use of this API to provide more functionalities to the Eclipse Users to interact with GitHub from within Eclipse. The core motivation of this project was to provide the basis but much awaited functionality of raising a Pull Request from within Eclipse between Remote Forks.

Features now available within eGit-Extension

1. Raise a Pull Request from 1 Fork Branch to Another Remote Fork Branch in Github
  - a. Visualise existing PullRequest and its Commit History between 2 Remote Branches
2. Visualise Forks on a selected Local Repository Branch
3. Adding Remote and Performing Fetch of Remote by selecting a Fork

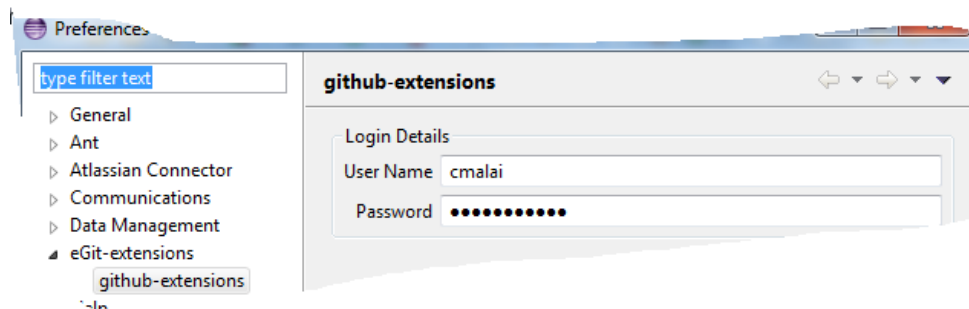
## Download and Installation

eGit Extension is available on a P2 Update Site on <http://www.ancitconsulting.com/gitHub-pr/>  
Pre Requisites for eGit-Extension is Github Mylyn Connector plugins. Follow the Blog below to setup.

Blog by Ian Bull : <http://eclipsesource.com/blogs/2012/08/28/tips-and-tricks-using-eclipse-with-github/>

## Setup eGit-Extension for Use

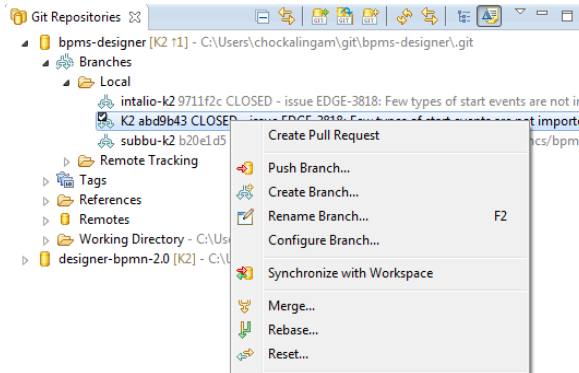
GitHub can access Public Repositories without logging in but has a restriction on API Usage from an Application, also github recommends to be logged in to access Private Repositories. Therefore, it is recommended to login into Github before you start using eGit-Extension.



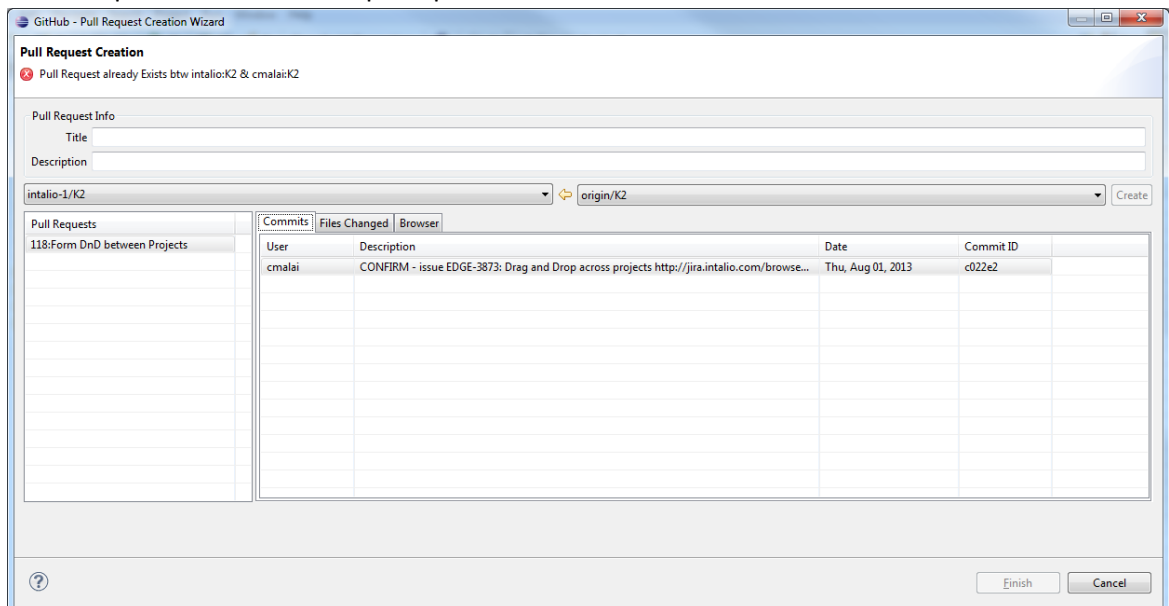
Click on Windows > Preferences > eGit Extensions > github Extensions provides you a screen as shown above. Fill In your Login Details, Click Apply and OK. You are ready to use eGit-Extension

### Feature 1 : Raise a Pull Request from within Eclipse

1. Select a Local Branch on which you wish to raise your PullRequest from.
2. Right Click and Select Create Pull Request from the Context Menu.



3. A PullRequest Wizard would open up.



4. You need to select the TO and FROM Branch to create a Pull Request. From Branch is by Default set to the remote of the Local Branch that you selected to open the PullRequest Wizard. If there is a PullRequest already that exists between the 2 Branches that you have selected, the "Create" button would be disabled and an error would be displayed to indicate the existence of the pullRequest. Existing PullRequest from all the Users on a selected To and From Branch can be visualized on this wizard. Selecting an individual PullRequest from the PullRequest List would

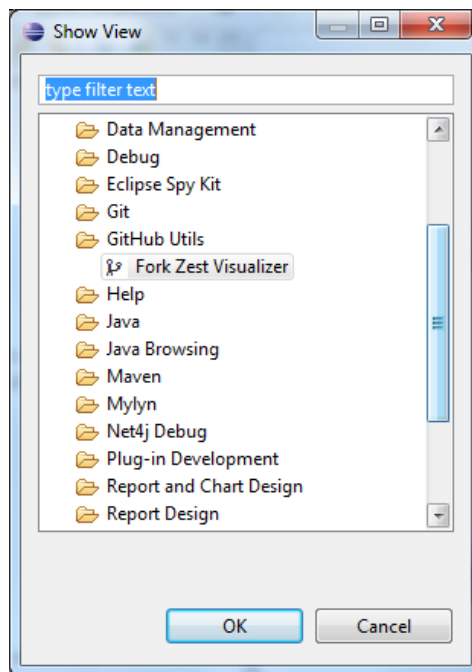
show you details of the Commits present in the PullRequest. Double Click on the Commit to see the Commit on the Browser Tab.

5. To raise a PullRequest, you need to enter the Title and Description of the PullRequest and click on the Finish Button. On successful creation of the PullRequest, the Message Bar of the wizard would show a Success Message. Click on the Browser Tab to visualize the PullRequest created in Github to get more details.

## Feature 2 : Visualize the Forks of a Repository

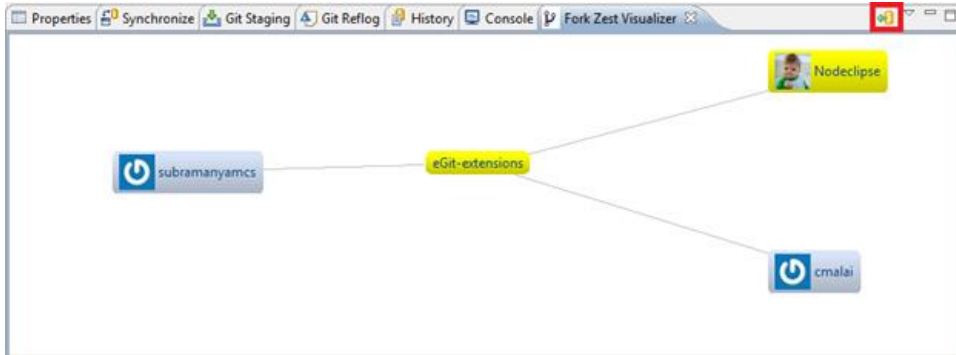
Inspired by the Fork Visualization option in Github Website, this utility was developed for Eclipse Users. eGit-Extension provides support to visualize Forks of a given Repository using Zest within eclipse.

1. Open the Form Visualization View from Show View > Github Utils > Fork Zest Visualizer



2. Select a Local Branch of your Repository from the Git Repositories View to visualize the Forks of that Github Repository. If the repository that you are accessing is a Private Repository and you havnt logged into Github as mentioned in **Setup eGit-Extension for Use** section, you would be prompted with an Warning Dialog prompting you to login into github

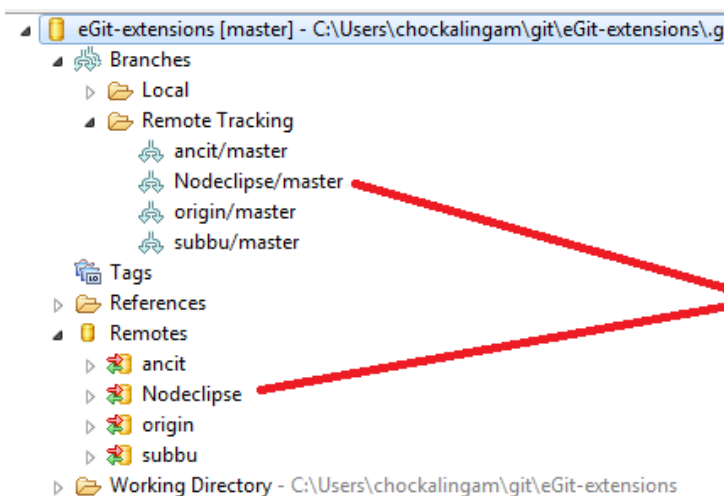
On selecting the Branch, you would visualize your Repository Forks as shown below



### Feature 3 : Add Remote and Perform Fetch using eGit-Extension

Many a times we would want to add a Fork as a Remote into a Git Repositories for Merge and Rebase options. Currently with Github Mylyn Connector this is not possible. Therefore in eGit-Extension Fork Visualization view provides you with an extended functionality of 1 Click -> Adding Remote and Performing Fetch on the selected fork.

1. Fork Visualization View is provided with a ToolBar Action as marked above in Red to Add Remote for the selected Form and perform a Fetch Operation
2. Click on the Add Remote Action to Add Remote of the selected Fork in your GitConfig and perform a Fetch operation to see an output as shown below. Remotes Node and Remote Tracking Node should be updated as shown below.



*Remote Repo should be created and Fetch of Remote Repo should happen to update the Remote Tracking with the Branches of the Remote.*

## Upcoming Features

Thanks to the support that we are receiving from the community, the team at eGit-Extension intends to extend the functionality of eGit-Extension to a full fledged GitHub Dashboard that is made available from within Eclipse.

## Collaborate on eGit-Extension

P2 Update Site : <http://www.ancitconsulting.com/gitHub-pr/>

GitHub Site: <https://github.com/ANCIT/eGit-extensions>

Read More on <http://www.ancitconsulting.com/tiki-index.php?page=eGit-extensions>

## References

1. Tips and Tricks : Using Eclipse with Github, Ian Bull,  
<http://eclipsesource.com/blogs/2012/08/28/tips-and-tricks-using-eclipse-with-github/>
2. Github Developer,  
<http://developer.github.com/>
3. Github Connector, eclipse.org  
[http://wiki.eclipse.org/EGit/GitHub/User\\_Guide](http://wiki.eclipse.org/EGit/GitHub/User_Guide)