

# **GIT BRANCH AND MERGE**

DXC DevOps

**Version 0.1**

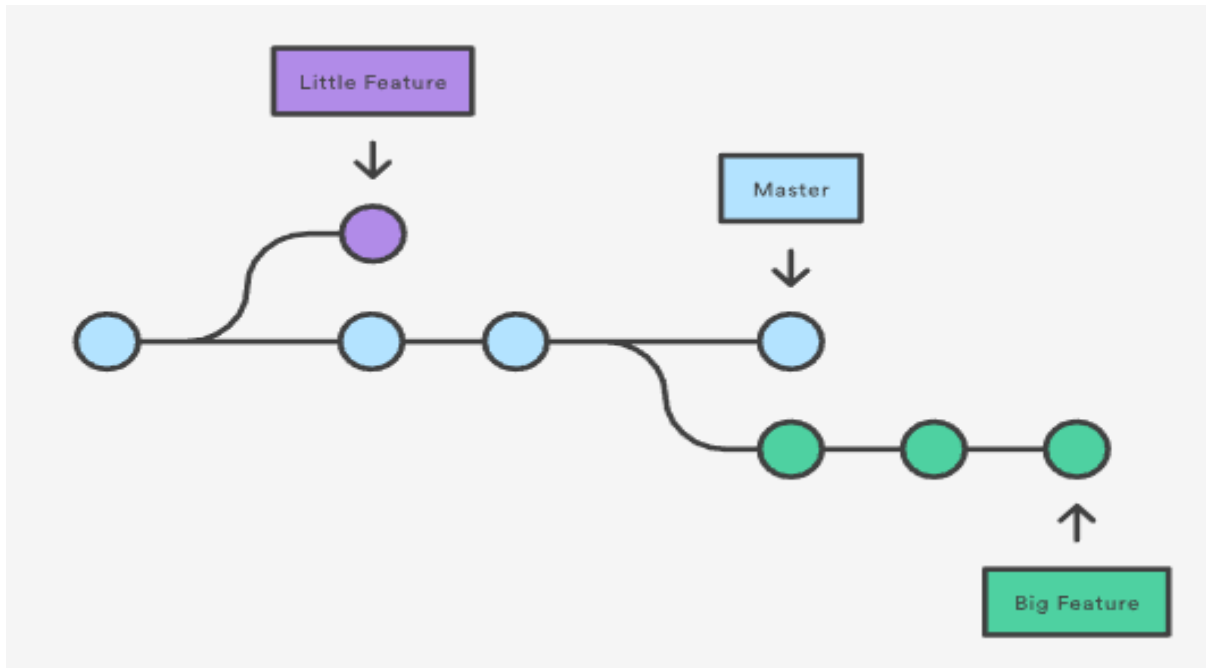
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Issued	Amend By	Version	Revision Comments
27/07/2017	Michael Carey	0.1	Created

## PREREQUISITES

A branch represents an independent line of development. You can think of them as a way to request a brand new working directory, staging area, and project history.



## STAGING AND DEPLOYING

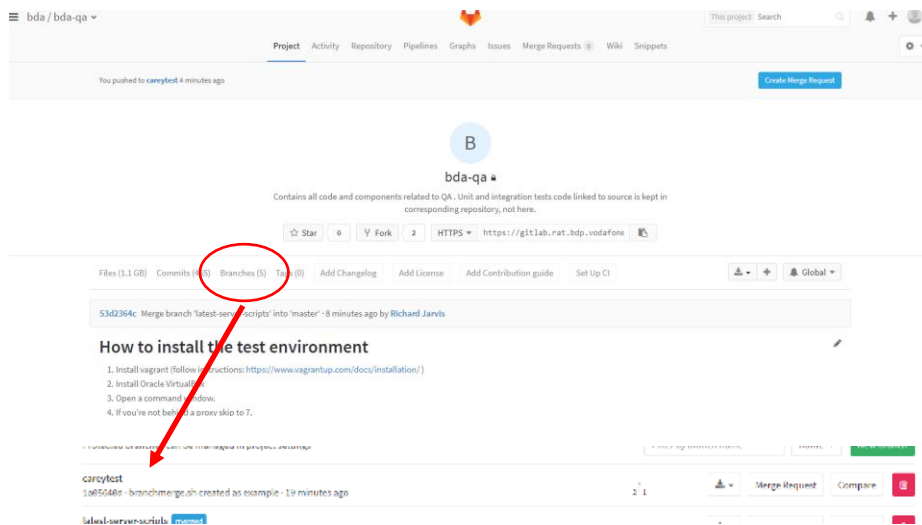
1.	The first thing that should be done is to “git clone” or “git pull” your chosen Git Repository so that you have the most up to date version for branching.
2.	<p>If you type “git status” it will show you which branch you are currently using. It also highlighted this above your command line in blue. <i>Note: see circled areas in the below screen shot.</i></p> <pre> git status  CareyM2@E0237904 MINGW64 ~/Desktop/bda-qa (master) \$ git status On branch master Your branch is up-to-date with 'origin/master'. nothing to commit, working tree clean </pre>

3.	<p>Now you can make your branch, type “git branch” then the name you want to give it e.g.: “git branch vf-uk-.....” <i>Note: Give a meaningful name, <b>NOT</b> like the example below</i></p> <pre>git branch &lt;branch name&gt;</pre> <pre>CareyM2@E0237904 MINGW64 ~/Desktop/bda-qa (master) \$ git branch careytest</pre>
4.	<p>Type “git checkout” and the name you gave your branch. You can now freely edit without effecting the master version. <i>Note: The git bash terminal states that you have switched to that branch, see circled areas in the below screen shot.</i></p> <pre>git checkout &lt;branch name&gt;</pre> <pre>CareyM2@E0237904 MINGW64 ~/Desktop/bda-qa (master) \$ git checkout careytest Switched to branch 'careytest'</pre>
5.	<p>If you type “git status” it will show you which branch you are currently using.</p> <pre>Git status</pre> <pre>CareyM2@E0237904 MINGW64 ~/Desktop/bda-qa (carey) \$ git status On branch carey nothing to commit, working tree clean</pre>
	<p>After finishing it’s time to add, commit and push the files on your branch back to the repo.</p> <p><i>Note: This is only pushing them back to the repository, you are not adding them back into the master version.</i></p>
6.	<p>Type “git add” and select the files you have edited or created.</p> <pre>git add &lt;example files&gt;</pre> <pre>CareyM2@E0237904 MINGW64 ~/Desktop/bda-qa/vagrant (careytest) \$ git add branchmerge.sh</pre>

7.	<p>Type “git commit –m” then add a meaningful message as to what you have done. Keep the message clear, concise and meaningful, everyone will see this on the git repository web interface. <i>Note: Make sure the message is in quotation (“message”) marks as exempld below.</i></p> <pre>git commit -m "&lt;example message&gt;"</pre> <pre>CareyM2@E0237904 MINGW64 ~/Desktop/bda-qa/vagrant (careytest) \$ git commit -m "branchmerge.sh created as example" [careytest 1a05640] branchmerge.sh created as example Committer: Carey &lt;michael.carey@vodafone.com&gt;</pre>
8.	<p>After doing the previous “git commit” you can check to see if there are any outstanding by doing a “git status”. If there is nothing else to commit you will receive a message like the one below.</p> <pre>git status</pre> <pre>CareyM2@E0237904 MINGW64 ~/Desktop/bda-qa/vagrant (careytest) \$ git status On branch careytest nothing to commit, working tree clean</pre>
9.	<p>Now you can push your edited branch to the git repository. Type “git push origin” and then the name of your branch.</p> <pre>git push origin &lt;branch name&gt;</pre> <pre>CareyM2@E0237904 MINGW64 ~/Desktop/bda-qa/vagrant (careytest) \$ git push origin careytest</pre>
10.	<p>You will see the git window show the progress of the push. Once this is complete you will also see a URL for your branch in the git repository. <i>Note: See the circled below, you can copy and paste this in to your desired web browser.</i></p> <pre>CareyM2@E0237904 MINGW64 ~/Desktop/bda-qa/vagrant (careytest) \$ git push origin careytest Counting objects: 3, done. Delta compression using up to 4 threads. Compressing objects: 100% (3/3), done. Writing objects: 100% (3/3), 347 bytes   0 bytes/s, done. Total 3 (delta 2), reused 0 (delta 0) remote: Create merge request for careytest: remote: https://gitlab.rat.bdp.vodafone.com/bda/bda-qa/merge_requests/new?merge_request%5Bsource_branch%5D=ca remote: remote: To https://gitlab.rat.bdp.vodafone.com/bda/bda-qa.git = [new branch] careytest -&gt; careytest</pre>

11.

Alternatively from that specific link, you can go to the git repository web interface and locate the branched from you repositories main page.



END OF WALKTHROUGH