



Bluemix Hands-On Workshop

Section 4- DevOps Services

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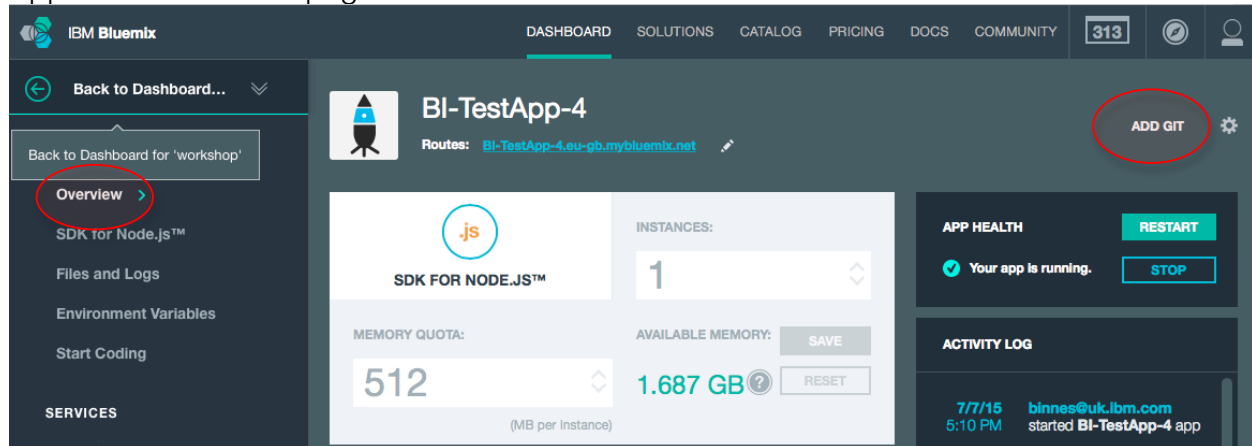
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Exercise 4.a - Bluemix integration with DevOps Services

This exercise looks at how Bluemix and DevOps Services work together

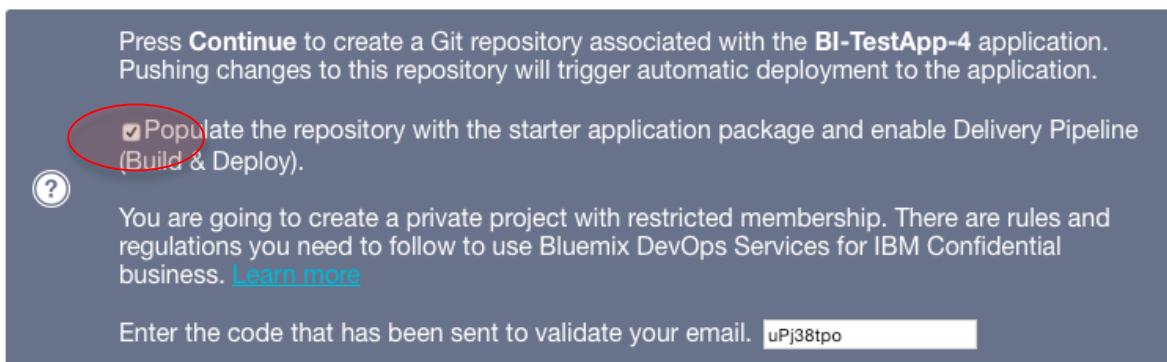
Log into Bluemix <http://bluemix.net> or <https://console.eu-gb.bluemix.net> and deploy the Node.js Cache Web Starter boilerplate from the Catalog.

Once the application is running select the Overview page then select 'ADD GIT' on the Application Overview page



add your DevOps Service details and select 'Sign In'. Ensure you leave the option to populate the repository selected then select 'CONTINUE'

Create Git Repository




CONTINUE

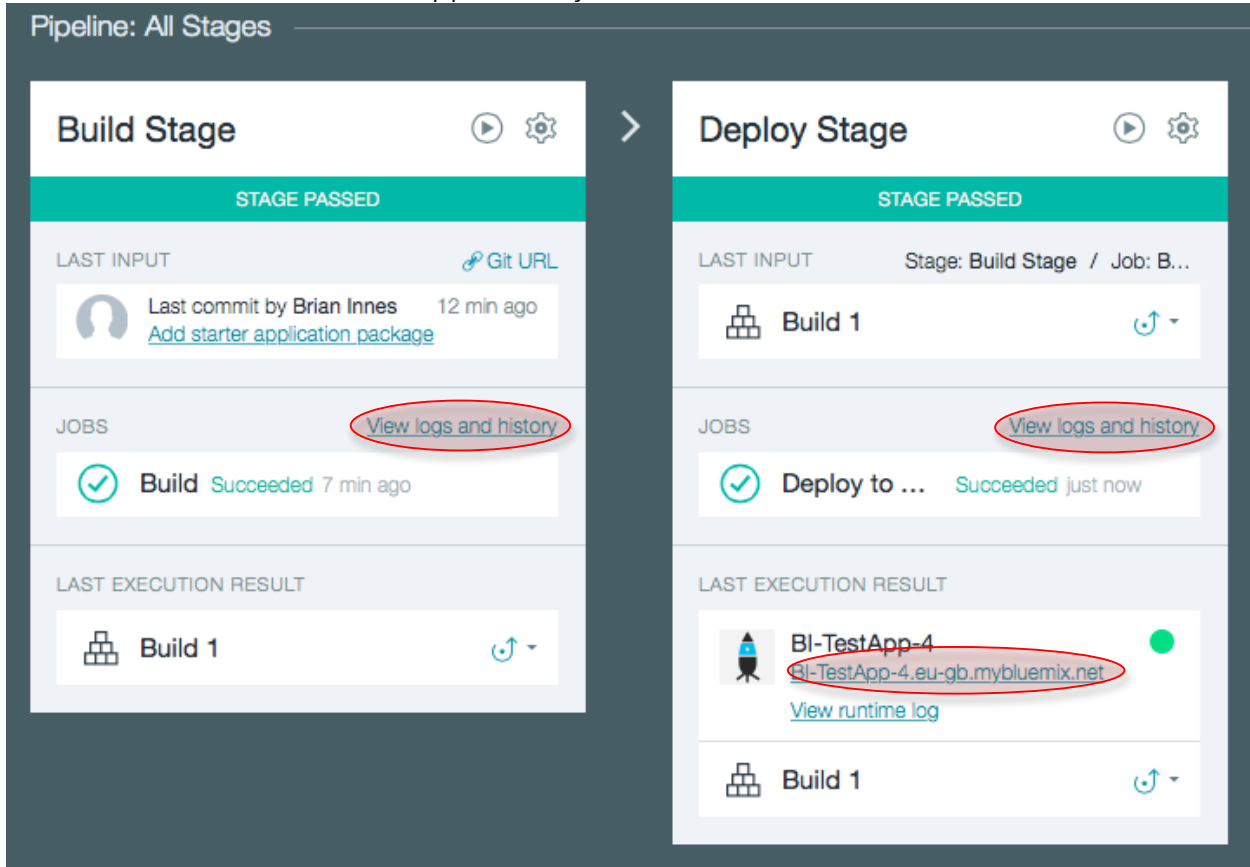
In the overview page you will now see the option to 'EDIT CODE'



select 'EDIT CODE' – you should be taken into DevOps Services with the sample application code imported and ready to work with.

Select 'BUILD & DEPLOY'. The project has automatically been set up to deploy code changes to Bluemix when they are pushed to the Git repository.

You can now modify the code and deploy to Bluemix from DevOps Services. To test this, select the  'run stage' icon in the Build Stage section of the pipeline. You will see the Build Queued, then the build running and finally Succeeded. Once the build has complete a deploy operation should be queued, then run. You should see the deployment running then Success – to launch the application you can click on the route:



The screenshot displays the 'Pipeline: All Stages' interface. It features two main panels: 'Build Stage' and 'Deploy Stage', both indicating 'STAGE PASSED'.

Build Stage:

- LAST INPUT:** Shows a commit by Brian Innes 12 min ago with a link to 'Add starter application package'.
- JOBS:** A job named 'Build' is shown as 'Succeeded' 7 min ago. A red circle highlights the 'View logs and history' link.
- LAST EXECUTION RESULT:** Shows 'Build 1' with a refresh icon.

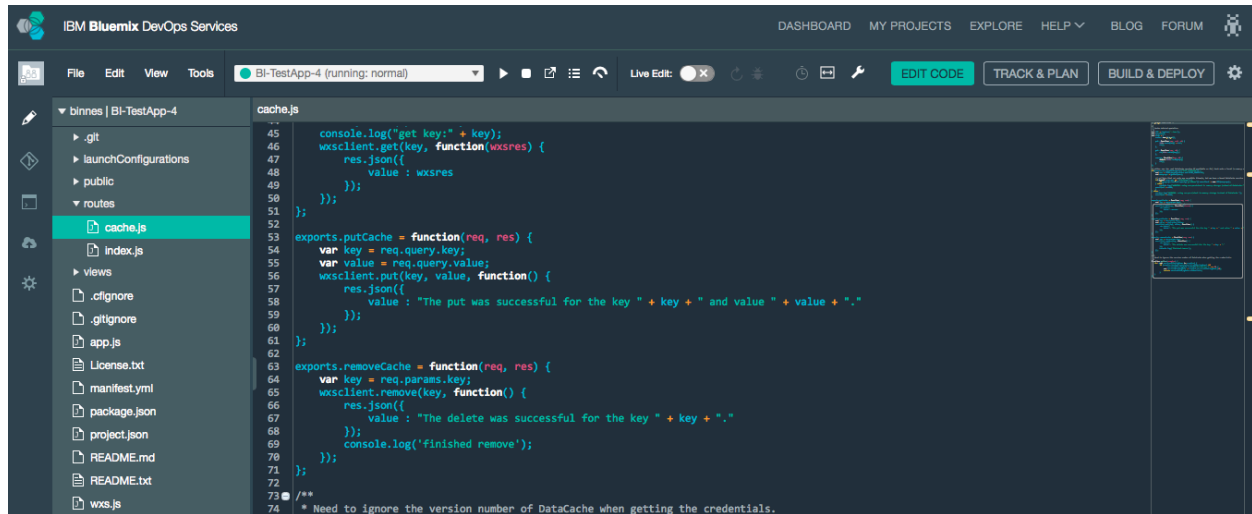
Deploy Stage:

- LAST INPUT:** Shows 'Stage: Build Stage / Job: B...'.
- JOBS:** A job named 'Deploy to ...' is shown as 'Succeeded' just now. A red circle highlights the 'View logs and history' link.
- LAST EXECUTION RESULT:** Shows 'BI-TestApp-4' with a green status dot. A red circle highlights the URL 'BI-TestApp-4.eu-gb.mybluemix.net' and the 'View runtime log' link below it.
- At the bottom, 'Build 1' is listed with a refresh icon.

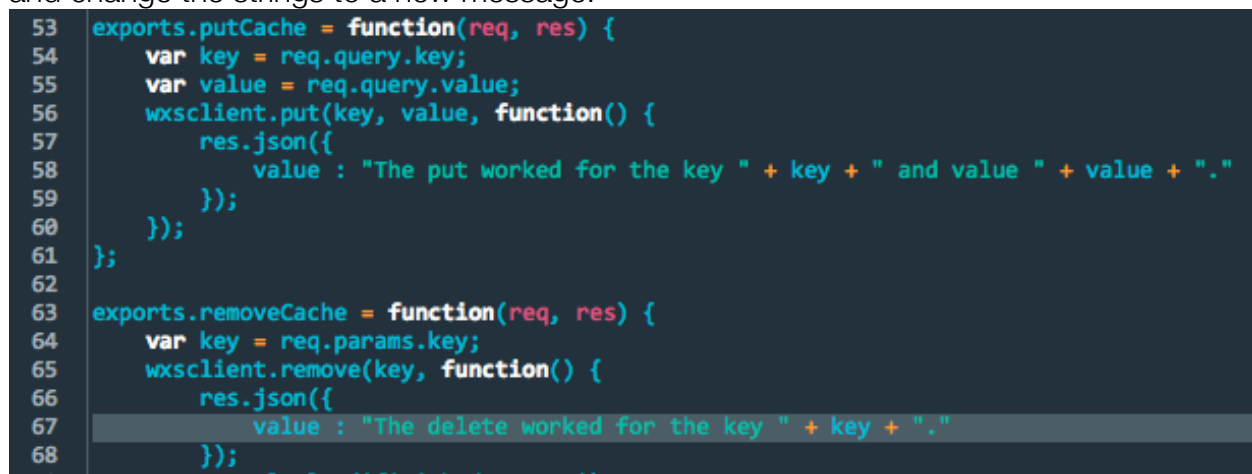
You can view logs and history for the build and deploy by clicking the links in the Build and Deploy stages.

Exercise 4.b – working in DevOps Services

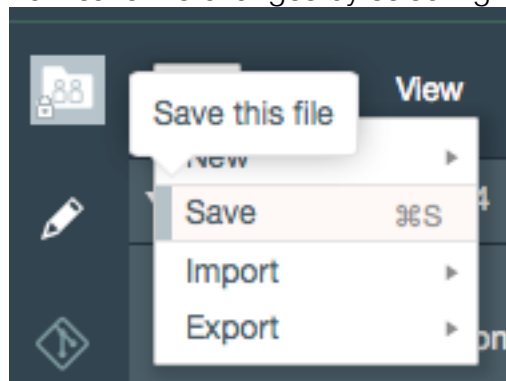
In DevOps Services switch to the 'EDIT CODE' section so we can edit the code.



Open the routes/cache.js file and scroll to line 58 to find the 2 strings that are displayed on a successful put ("The put was successful ...") or delete ("The delete was successful ...") and change the strings to a new message:

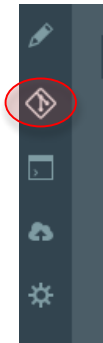


now save the changes by selecting 'File' from the menu, then 'Save'

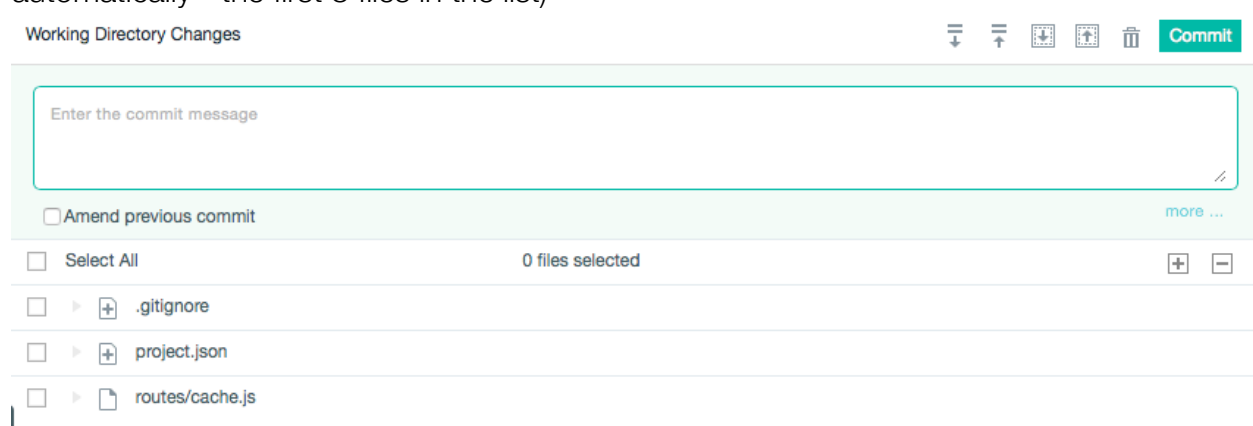


To get the changes pushed to Bluemix we need to commit the changes to the Git repository.

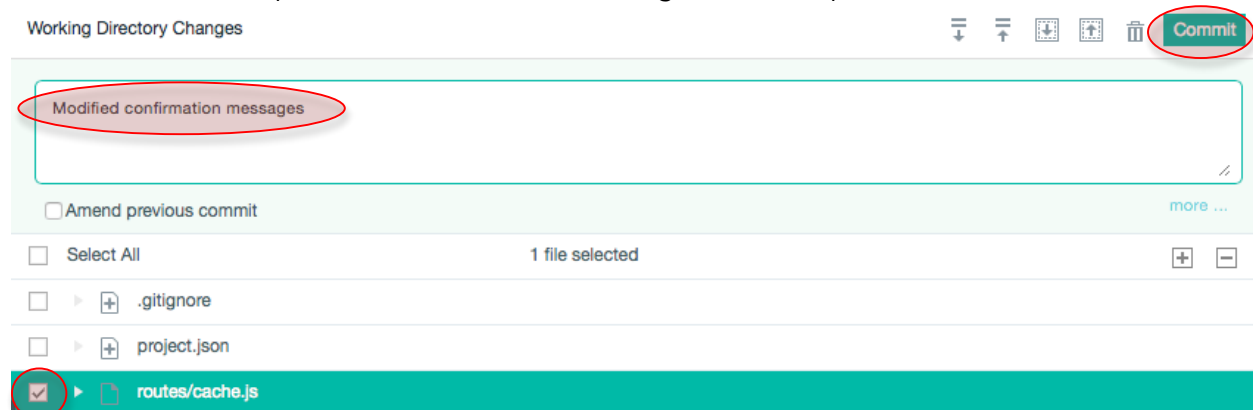
To work with the Git repository switch into the Git section



The files that have local changes are shown in the Changed Files section (Note, when a project is first added to DevOps Services some configuration files are updated automatically - the first 3 files in the list)

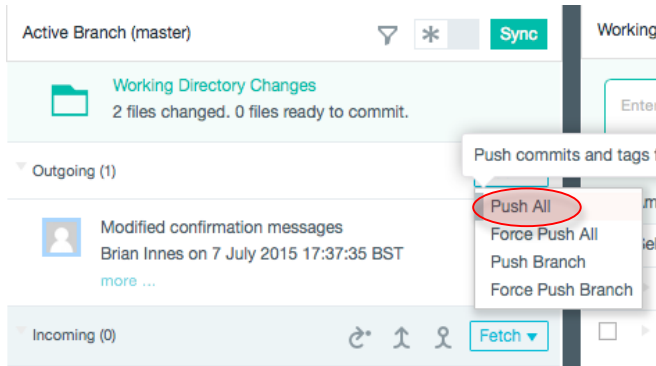


Select the JavaScript file, add a commit message and then press 'COMMIT'

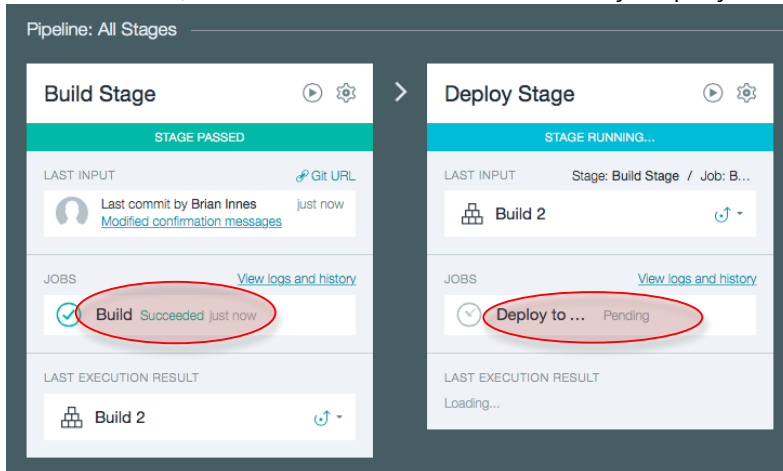


The commit was made to the local branch – the builder works from the remote branch, so we need to push out changes back to the remote. In the left hand column, expand the 'PUSH' dropdown and select 'Push All'

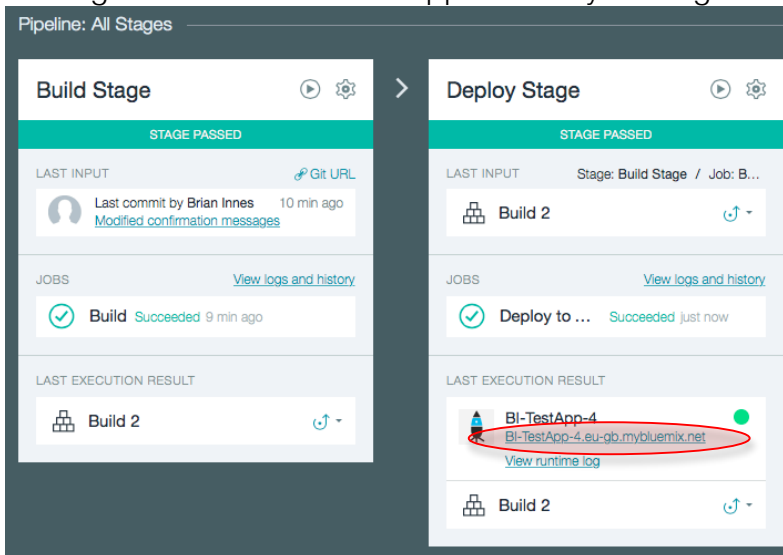
Section 4- DevOps Services



If you quickly jump to the BUILD & DEPLOY screen you will see a build has automatically been started, which will then be automatically deployed to Bluemix if successful.



Once the deploy has completed test the application to verify the code changes are now running. You can launch the application by clicking on the link in the deploy stage:



Note: if a build fails you can click on the build in the builder and it will take you to a detailed screen of build history, where you can get access to the logs, files and details of changes included in the builds. This can help determine why the build failed.