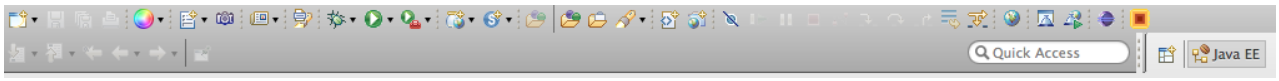
Rapidly Building Apps on the Cloud

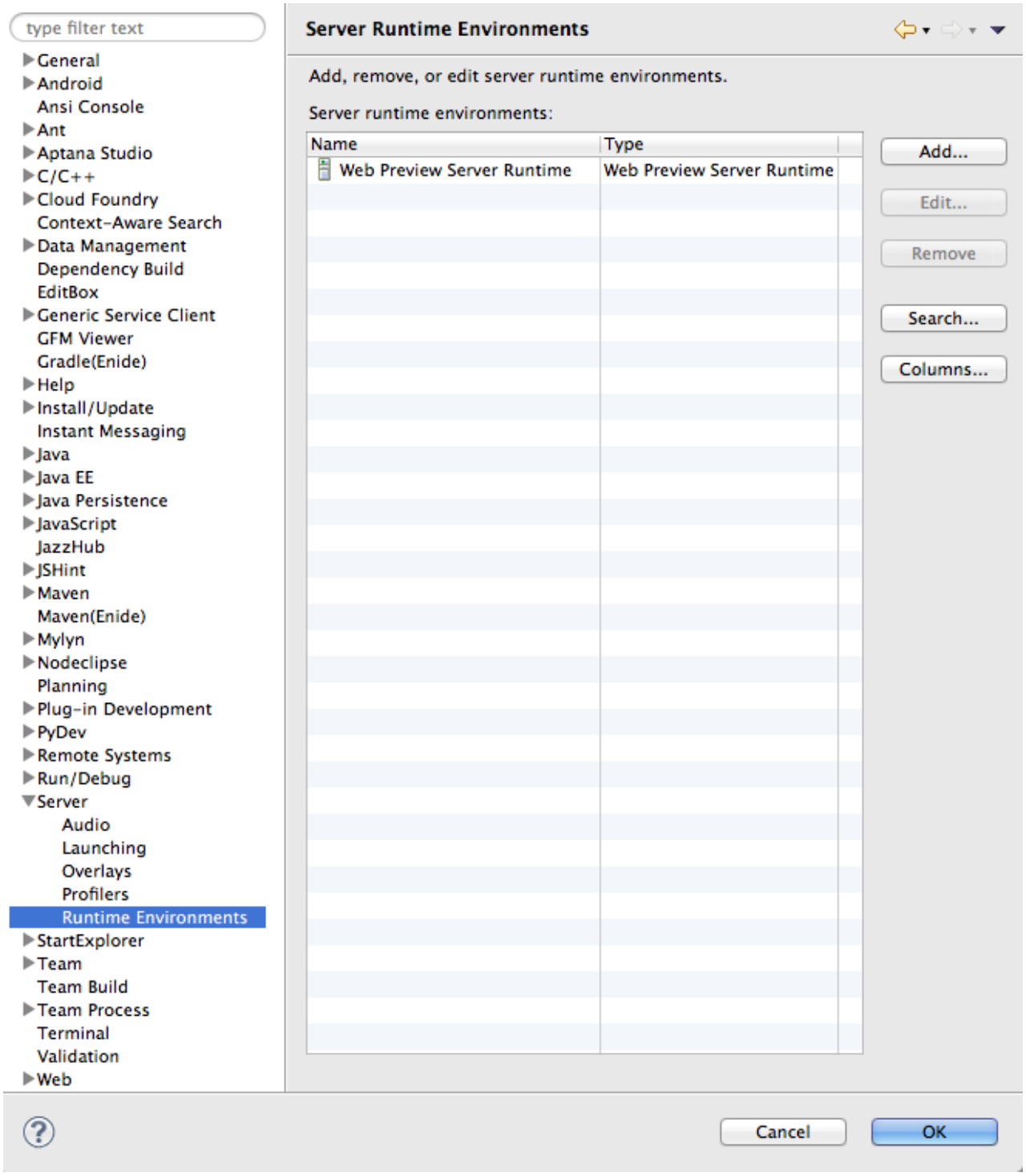
udemy.com/building-highly-scalable-apps-on-the-cloud/learn/v4/t/lecture/2953938

This exercise will show you how to work with Eclipse and Bluemix.

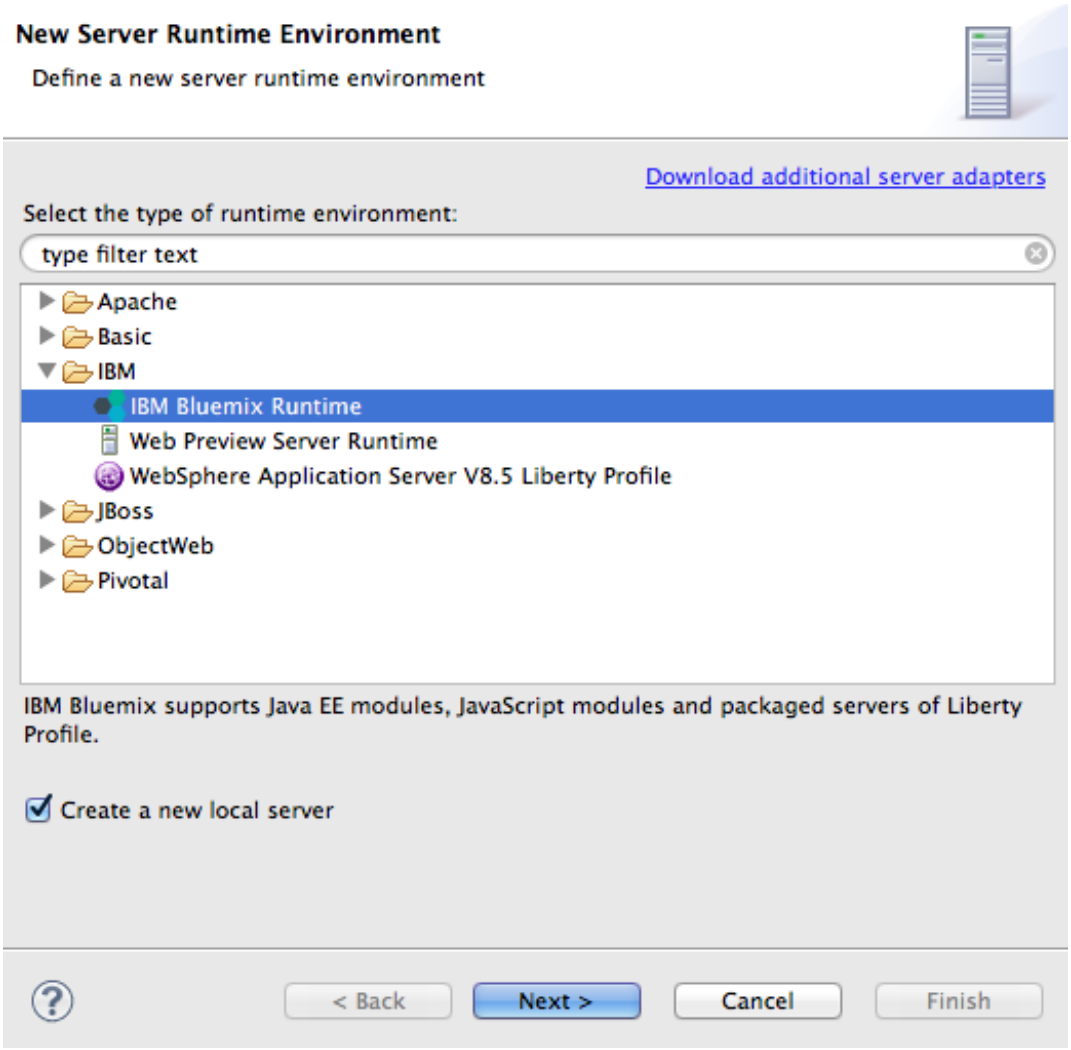
Launch Eclipse - suggest use a new workspace, but not essential. Switch to Java EE perspective.



First task is to configure Eclipse to use Bluemix as a server, so open up Eclipse Preferences and select Server -> Runtime Environments

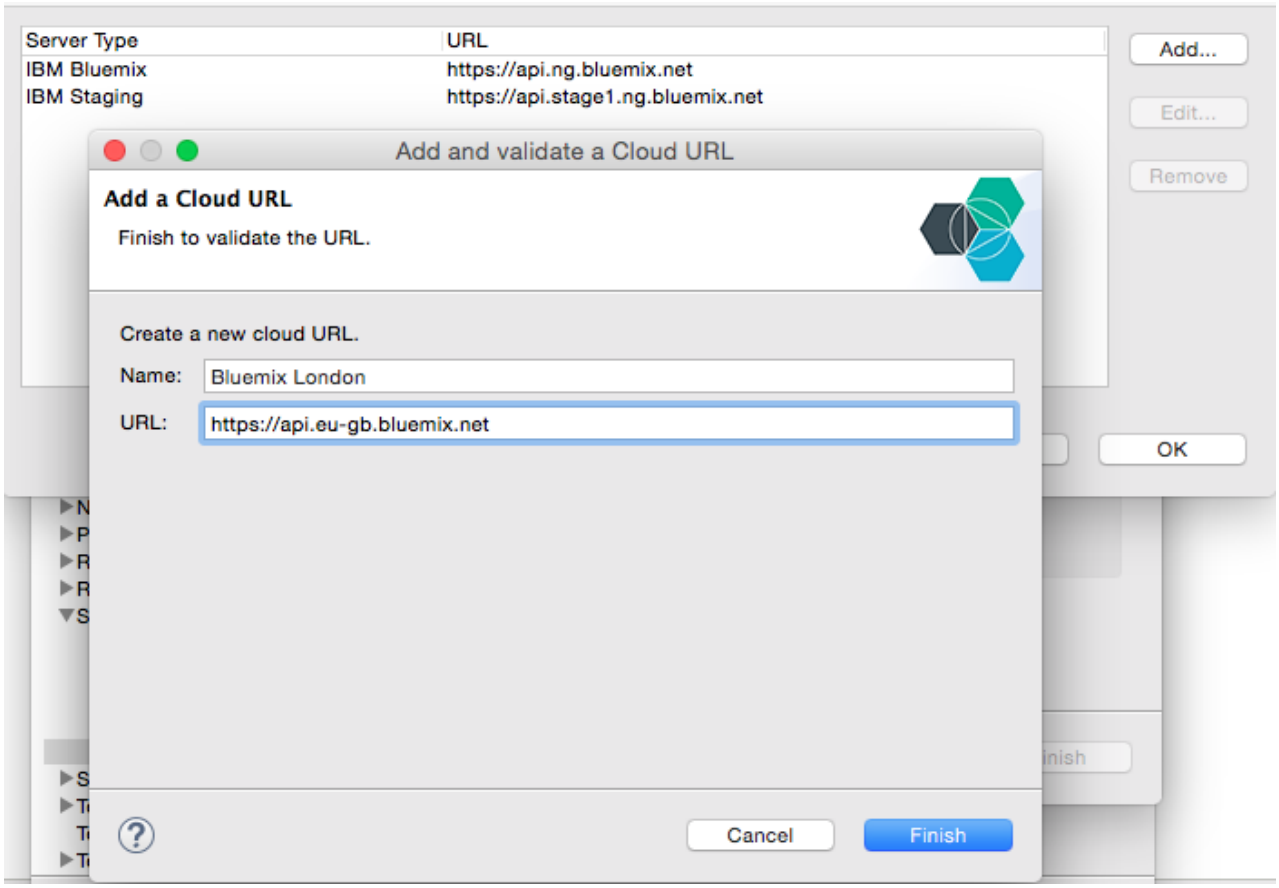


select 'Add…' then select IBM Bluemix Runtime and select 'Create a new local server checkbox'

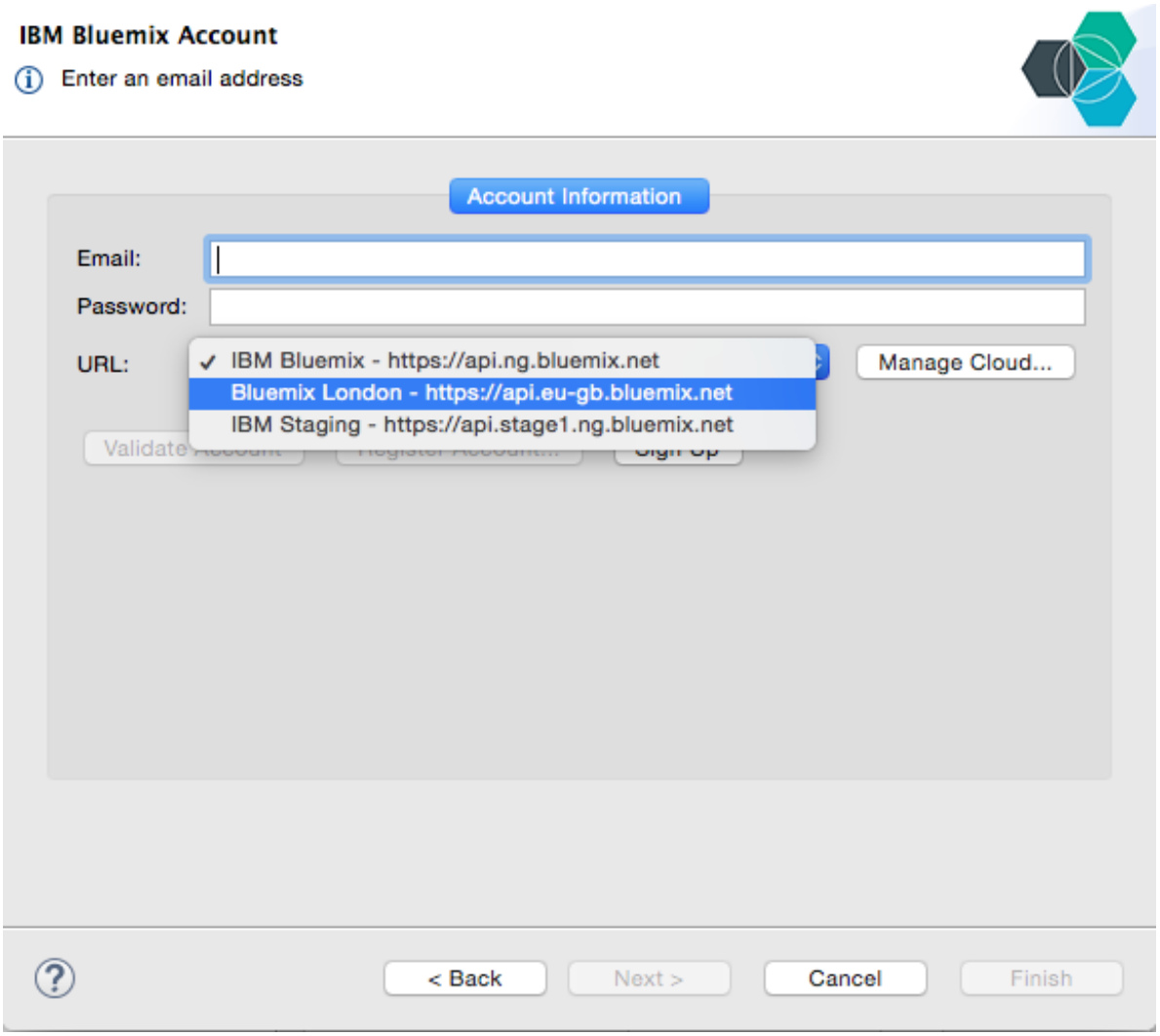


select 'Next >'

If you are using the United Kingdom region then you need to add a new Bluemix cloud by selecting 'Manage Cloud …'. Then select Add to add the details of the London Bluemix Region and select 'Finish' once you've added the details as shown below:



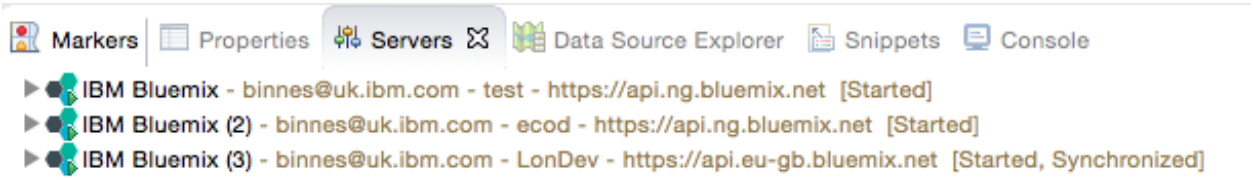
Select the appropriate URL to match the region you have been using:



Enter your Email and Password – these are the credentials you use to log into Bluemix. Select 'Validate Account' to ensure all details are OK then select 'next >'. Choose the organization and space you want to use then select 'Finish'. Select OK to close the preferences page.

Note: If you want to work with multiple spaces in Eclipse you need to create multiple server configurations.

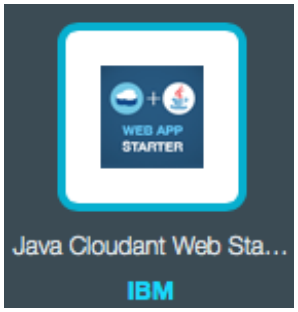
Open the Servers view in Eclipse – if it is not showing use the menu items -> Window -> Show View -> Servers to open the view

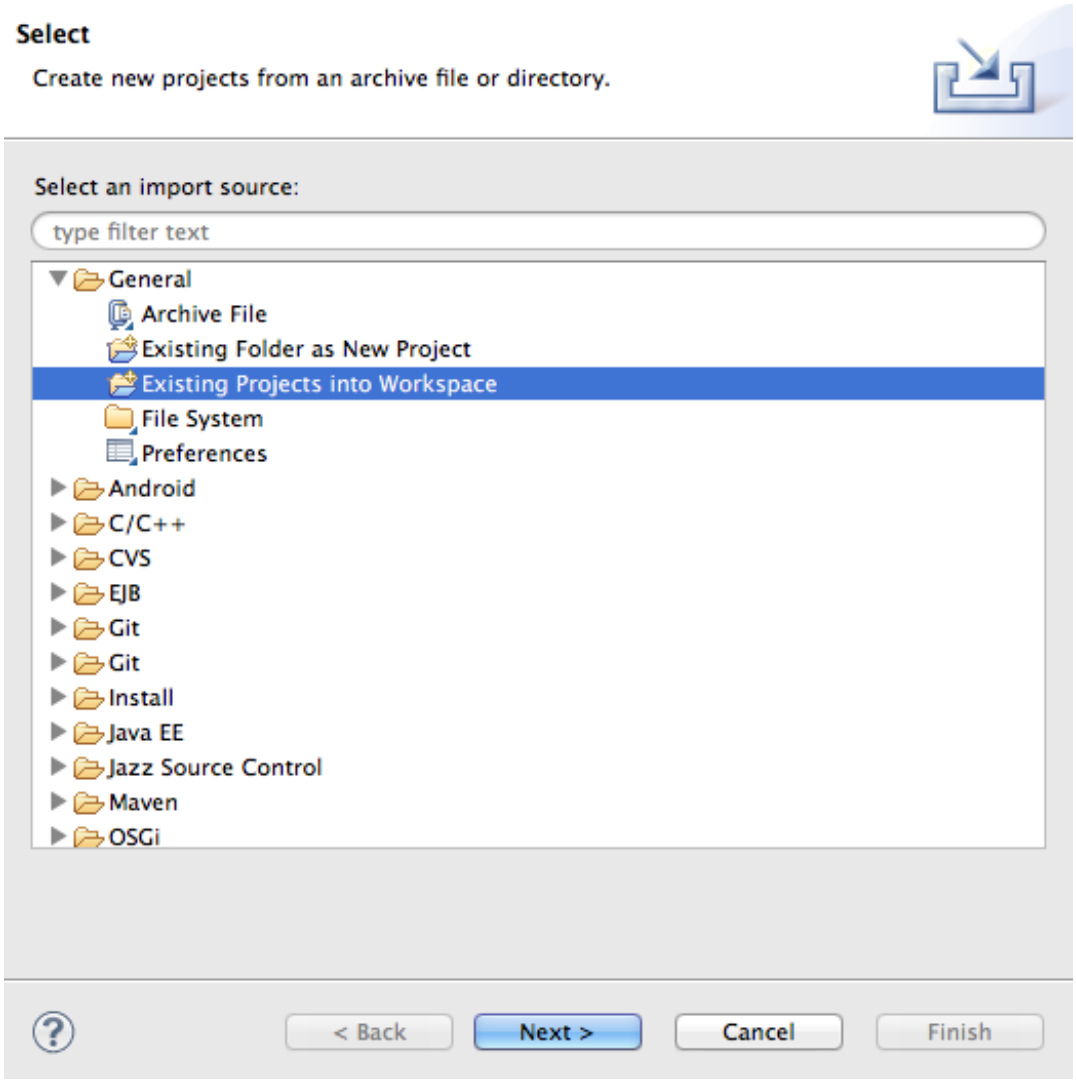


We will use the same application as we used in the last session, so you should have the archive file you downloaded in the last exercise already on your workstation – if not, deploy the Java Cloudant Web Starter application from the Bluemix UI, select View Guide then download the starter application.

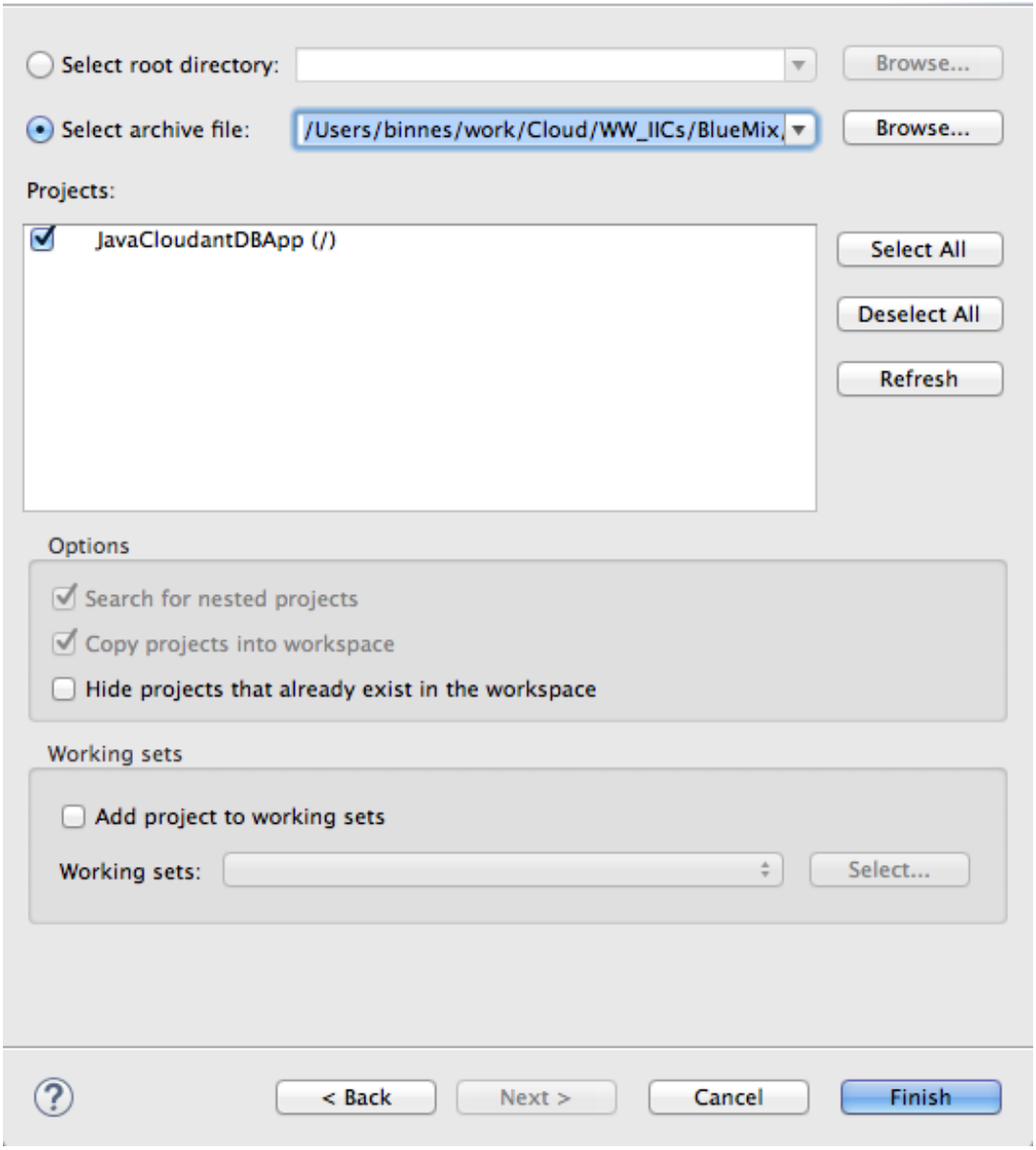
We need to import the starter application package to Eclipse – File -> Import

This will open up the Import dialog. Select General -> Existing Projects into Workspace





select 'Next >' then select the downloaded zip file and select 'Finish'

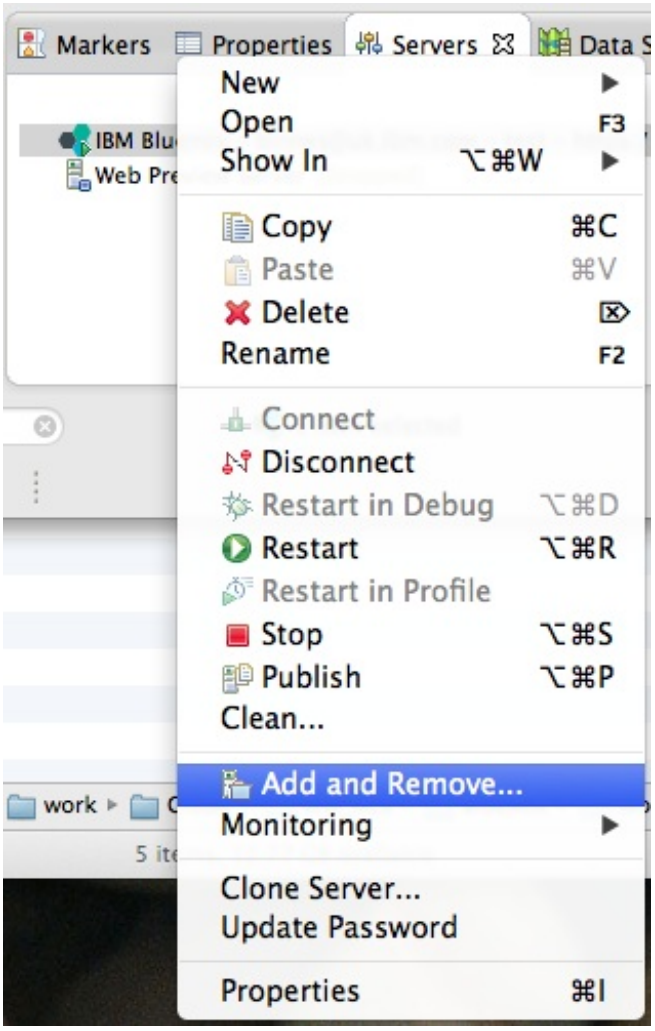


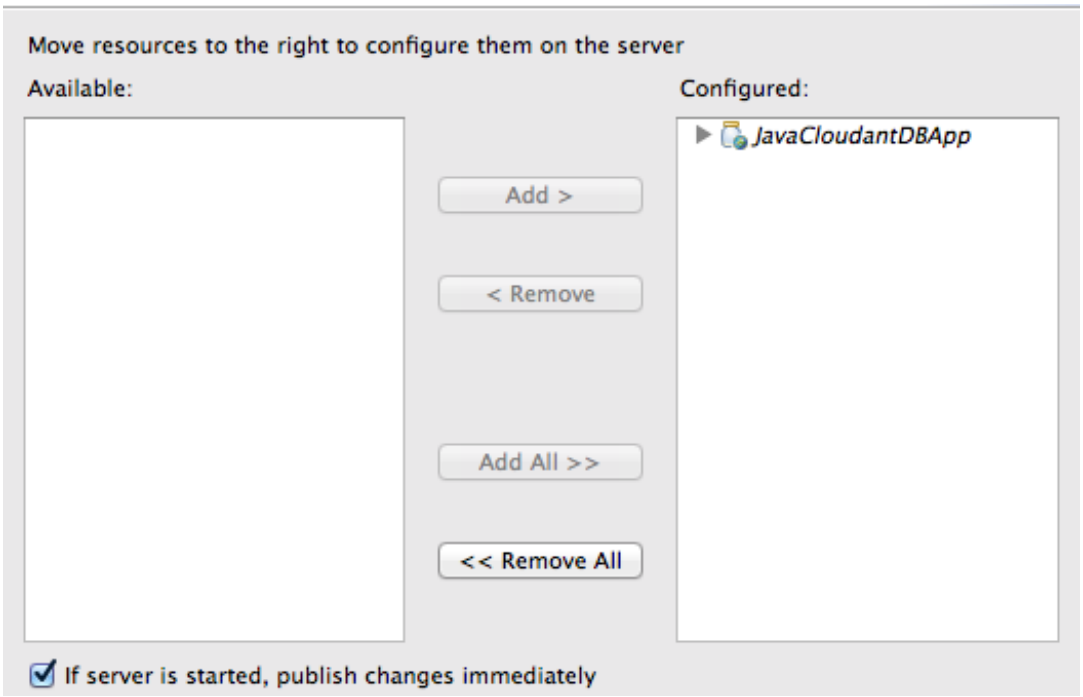
The project will be created

To deploy the application right-click on IBM Bluemix – select the server definition for the space you want to deploy the application to if you have multiple definitions in the Servers view

then Add and Remove

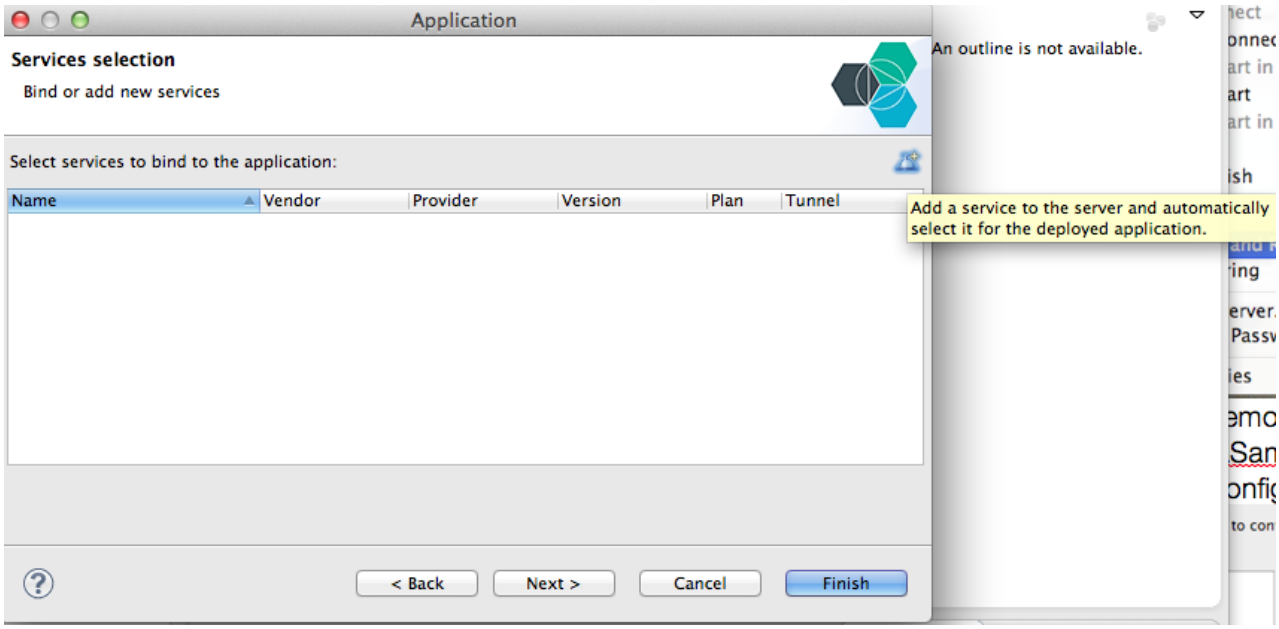
select the 'JavaCloudantDBApp' in the Available column and then select 'Add >', which will move it to the Configured column



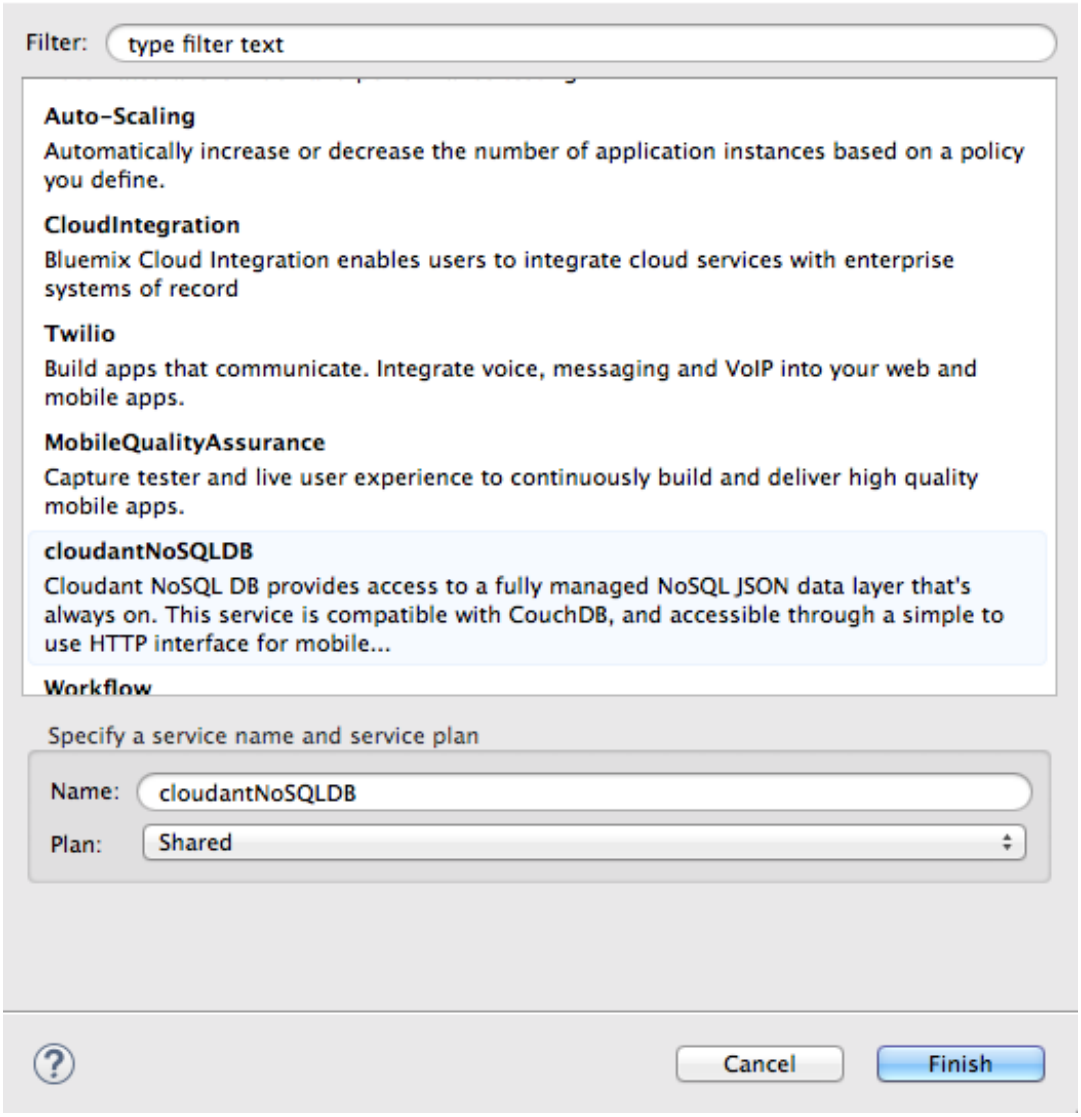


Press finish – this will then launch the deploy dialog. Change the Appication name to something unique then press 'Next', check the URL contains something that you think will be unique

Then press 'Next >' On the Services selection screen press the  icon to add a service

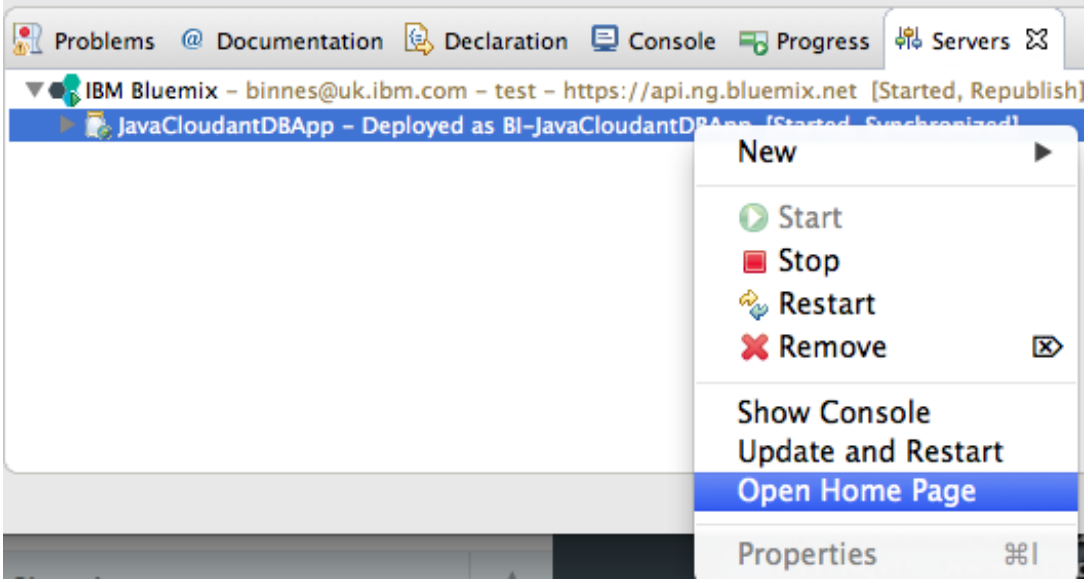


when the list of available services come up select the CloudantNoSQLDB service



press Finish and Finish again to close the application Deploy dialog. The application is now getting deployed to Bluemix. Eclipse should automatically switch to the Console view where you will see details of the deploy.

Once the application is running – switch back to the

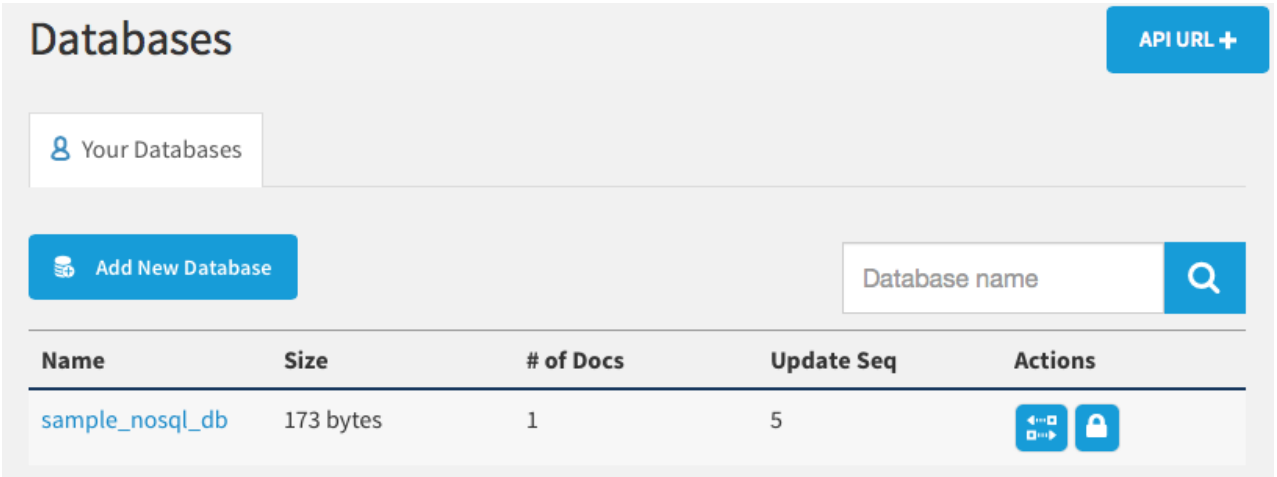


server view and expand the Bluemix server – you should see the application listed. You can launch the application from Eclipse by right-clicking on the application in the servers view and selecting 'Open Home Page'.

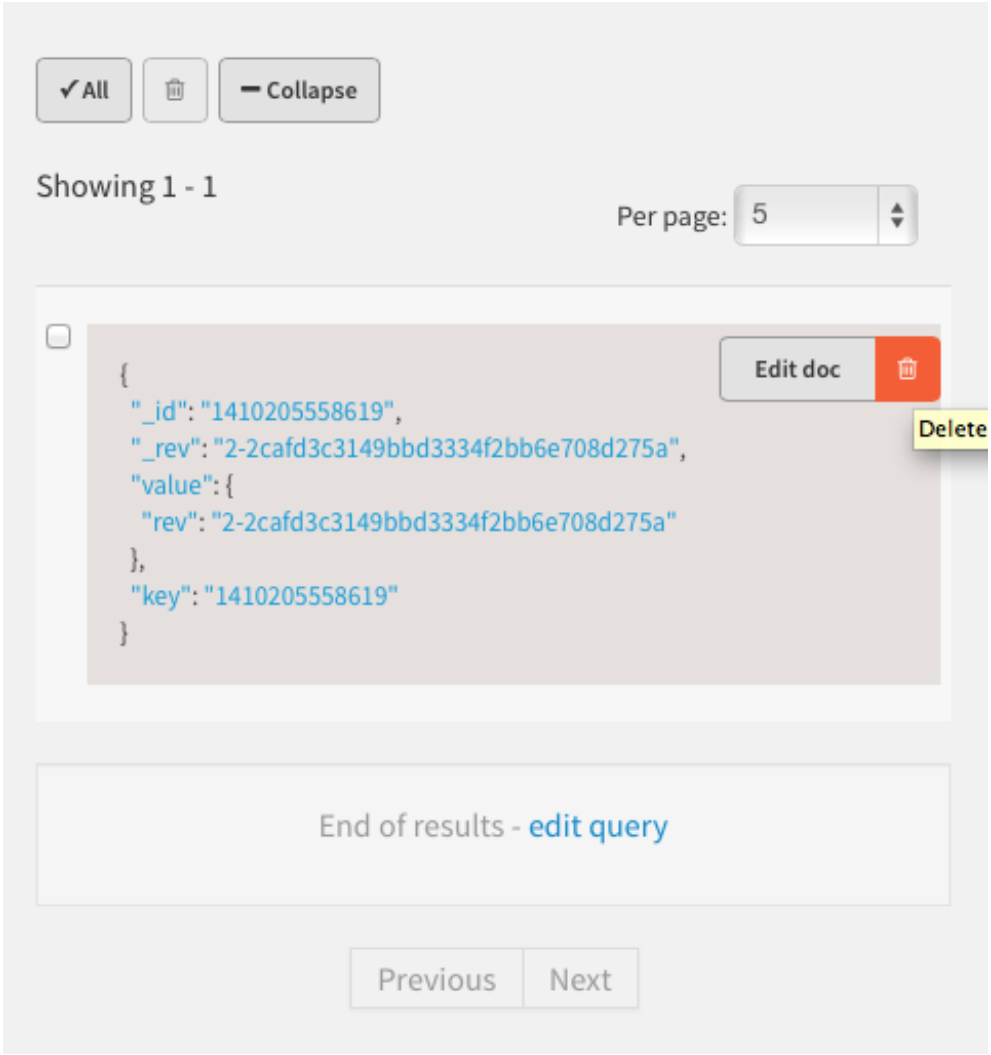
Note: In Eclipse you can alter the Browser used to launch applications from the menu -> Window -> Web Browser - then select the preferred option.

We need to remove the sample file from the database to allow it to be populated again, so in the Bluemix Web UI select the Cloudant Service instance then launch the Cloudant Dashboard.

You should see a single DB



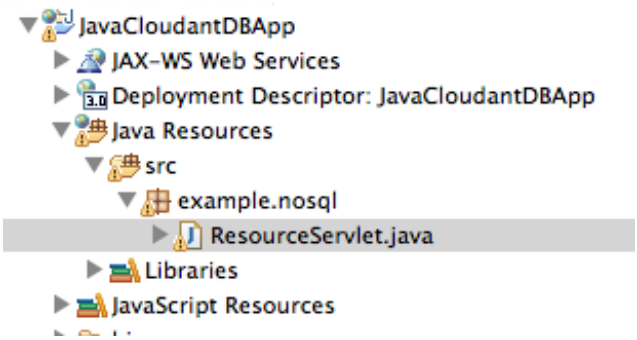
select it, then select to delete the document



confirm the delete when prompted.

In a text editor open up file src/example.nosql/ResourceServlet.java

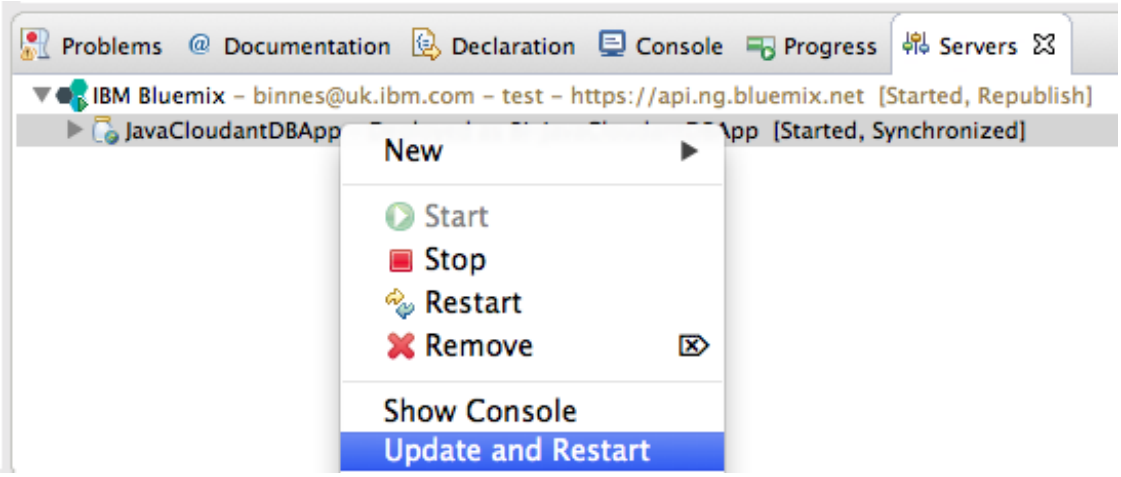
and modify the name of the file and file content (at the time of this writing, lines 346 and 349). Search for "MySample.txt".




```
345         //attachment#1
346         File file = new File("MySample.txt");
347         file.createNewFile();
348         PrintWriter writer = new PrintWriter(file);
349         writer.write("This is my sample file...");
350         writer.flush();
```

save the change File->Save then notice in the Server view the state of the Bluemix server has changed to republish – telling us that an application has changed, which is not yet been published to Bluemix. Select the

JavaCloudntDBApp application in the Server view and right-click then select 'Update and Restart'



Once the application has restarted test the application to ensure the change is now live.

To finish this exercise right-click the project in the Explorer view and select Delete to delete the project. Select to delete project contents on disk and then press OK. You will then be asked if you want to delete the cloudantNoSQLDB service – deleting a project deployed via Eclipse will also delete it from Bluemix! Select the checkbox to delete the service. In the Bluemix Web UI confirm that the application and server have been deleted.