



Getting Started with IBM Bluemix Hands-On Workshop

Exercise 3c: Working with Eclipse and Bluemix

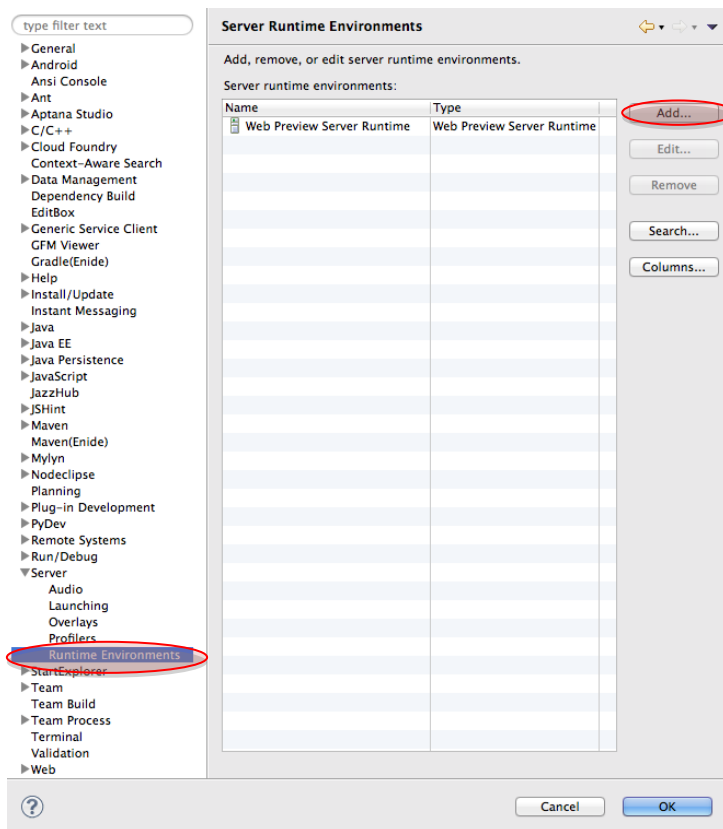
Working with Eclipse and Bluemix

This exercise shows you how to work with Eclipse and Bluemix.

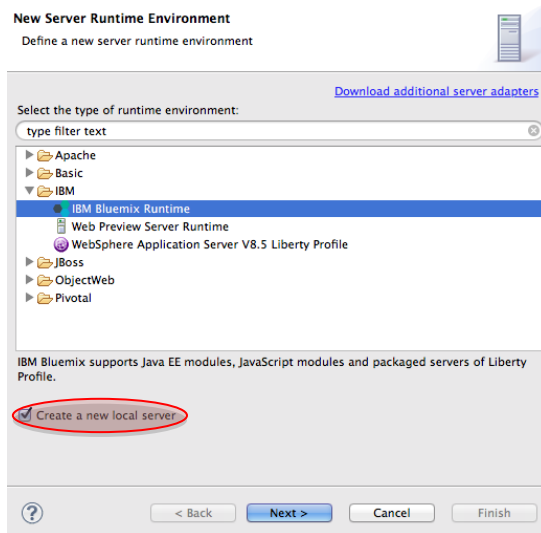
1. Launch Eclipse and switch to the JavaScript perspective. You should use a new workspace, but this is not essential.



2. Configure Eclipse to use Bluemix as a server by opening **Eclipse Preferences** and clicking **Server > Runtime Environments**.

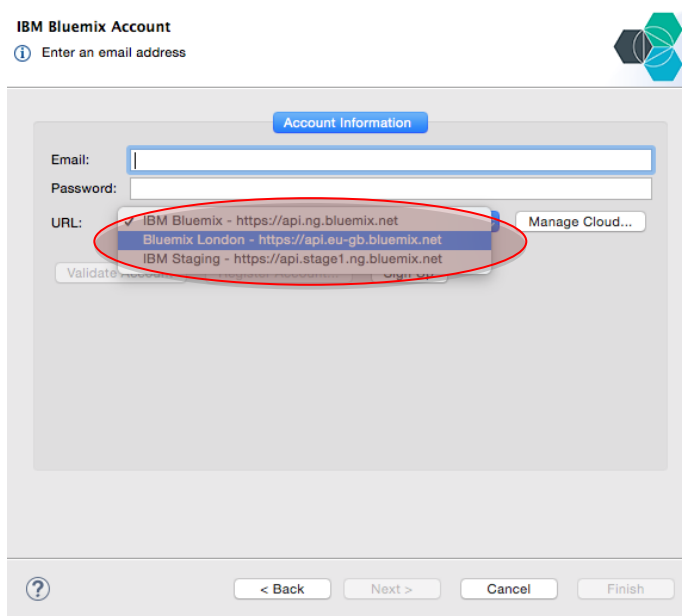


3. Click **Add**. Then, select **IBM Bluemix Runtime** and select the **Create a new local server** checkbox.



4. Click **Next**.

5. Select the appropriate URL to match the region that you have been using.

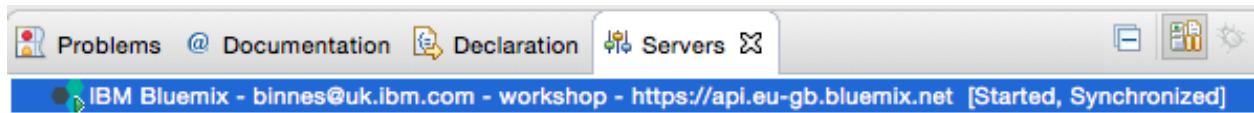


6. Enter your email and password, which are the credentials that you used to log into Bluemix. Click **Validate Account** to ensure that all details are valid and then click **Next**.

7. Select the organization and space that you want to use and then click **Finish**. Click **OK** to close the Preferences page.

If you want to work with multiple spaces in Eclipse, you must create multiple server configurations.

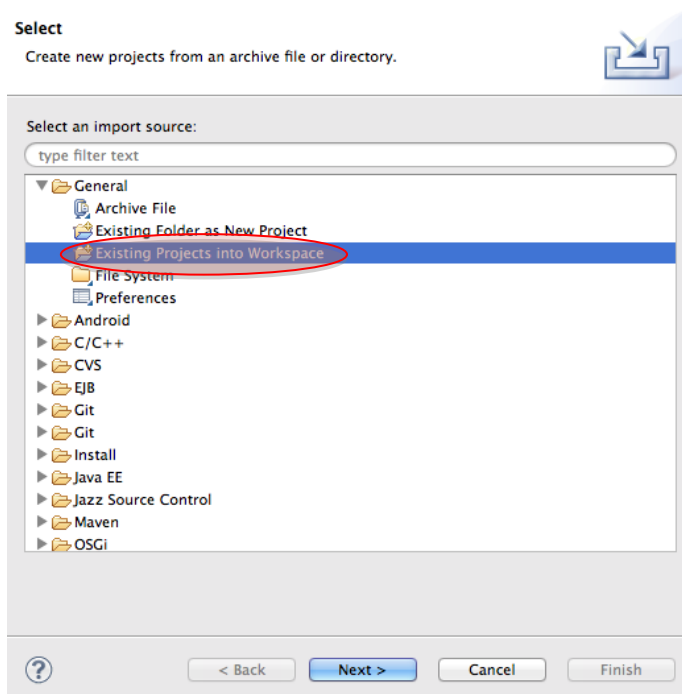
8. Open the Servers view in Eclipse. If it's not showing, click **Window > Show View > Servers**.



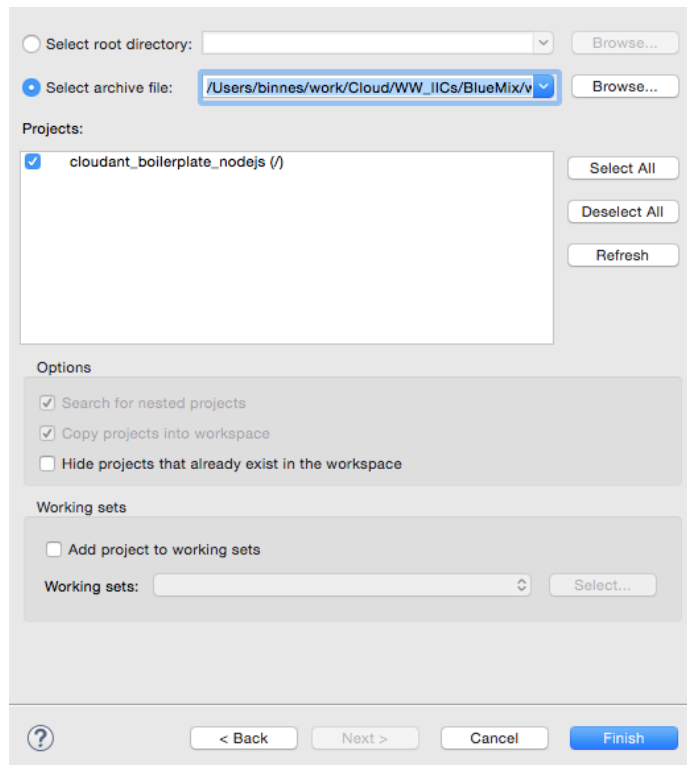
Use the same application that you used in the last session. You should have the archive file that you downloaded in the last exercise on your workstation. If not, deploy the Node.js Cloudant Web Starter application from the Bluemix web UI, click **View Guide**, and then download the starter application.

9. Import the starter application package to Eclipse by clicking **File > Import**.

10. In the Import dialog, click **General > Existing Projects into Workspace**.



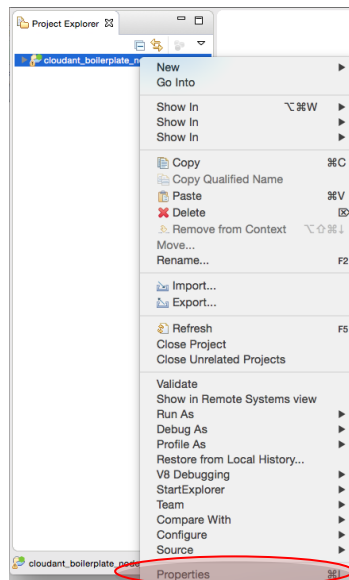
11. Click **Next**. Then, select the downloaded Zip file and click **Finish**.



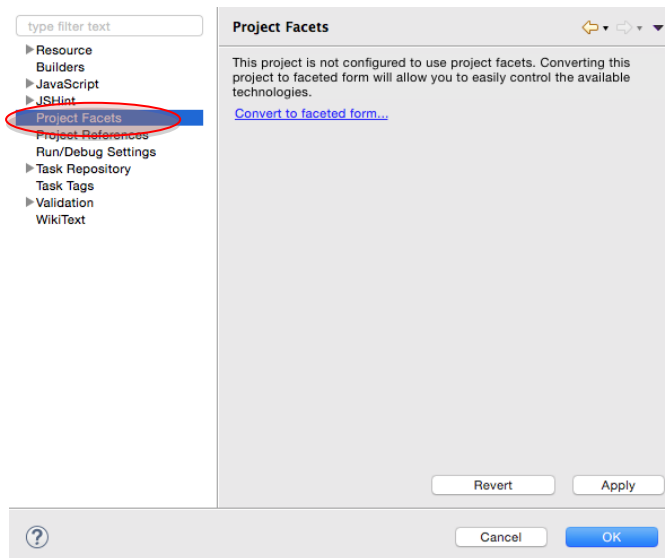
The project will be created.

Before JavaScript applications can be deployed to Bluemix by the plug-in, those applications must be identified as a project suitable for Bluemix deployment by assigning a facet to the project.

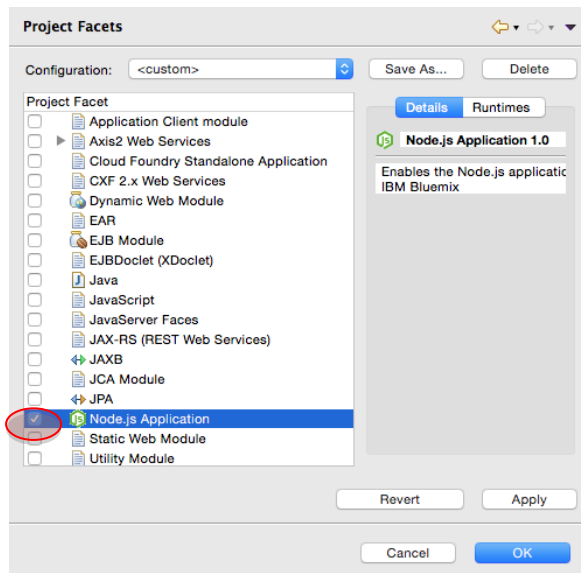
12. Right-click the project in the Project Explorer view and click **Properties**.



13. Click **Project Facets > Convert to faceted form**.

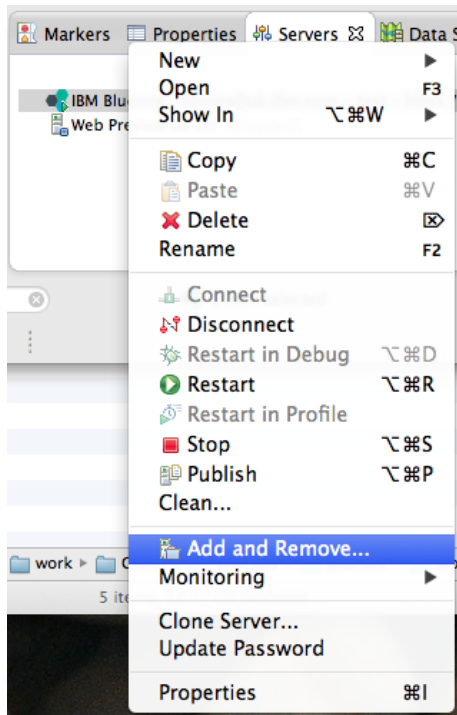


14. When you see the facets, select the **Node.js Application** facet. Click **OK** to close the dialog.



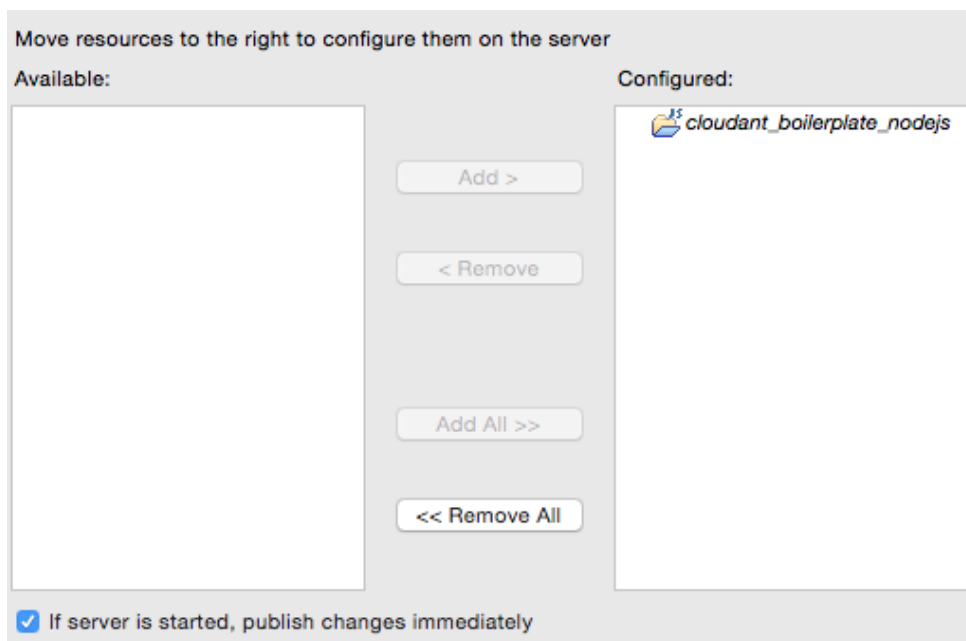
15. Delete the `manifest.yml` file by right-clicking it and clicking **Delete**.

16. Deploy the application. Right-click **IBM Bluemix**. If you have multiple definitions in the Servers view, select the server definition for the space that you want to deploy the application to.



17. Click **Add and Remove**.

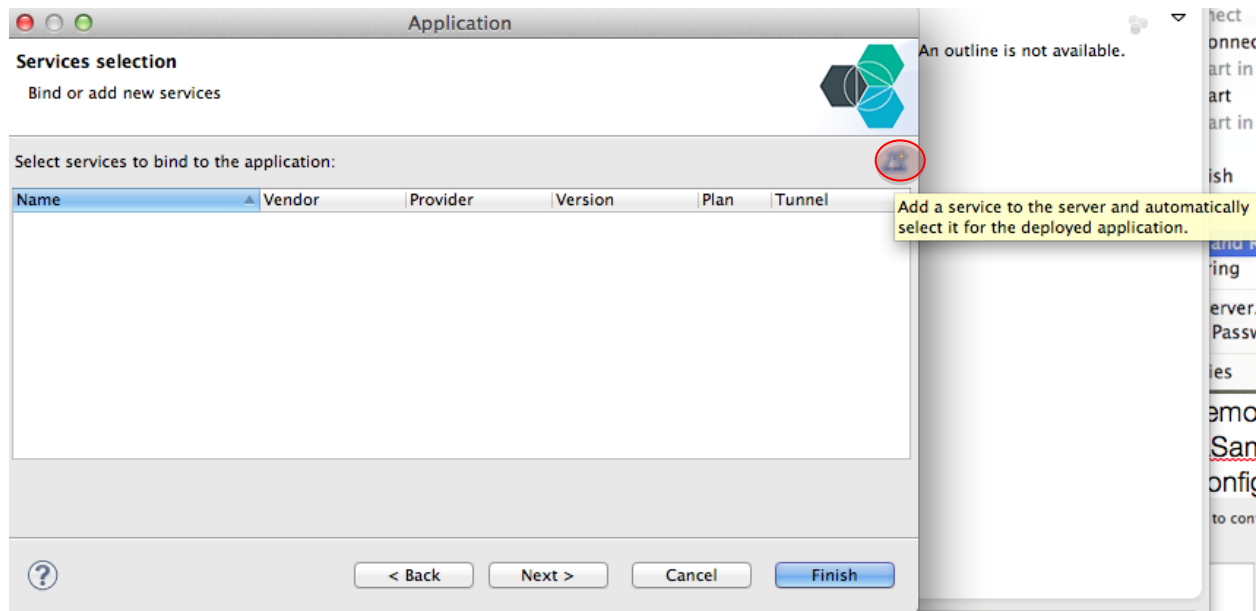
18. Select the **cloudant_boilerplate_nodejs** in the **Available** column and click **Add** to move it to the **Configured** column.



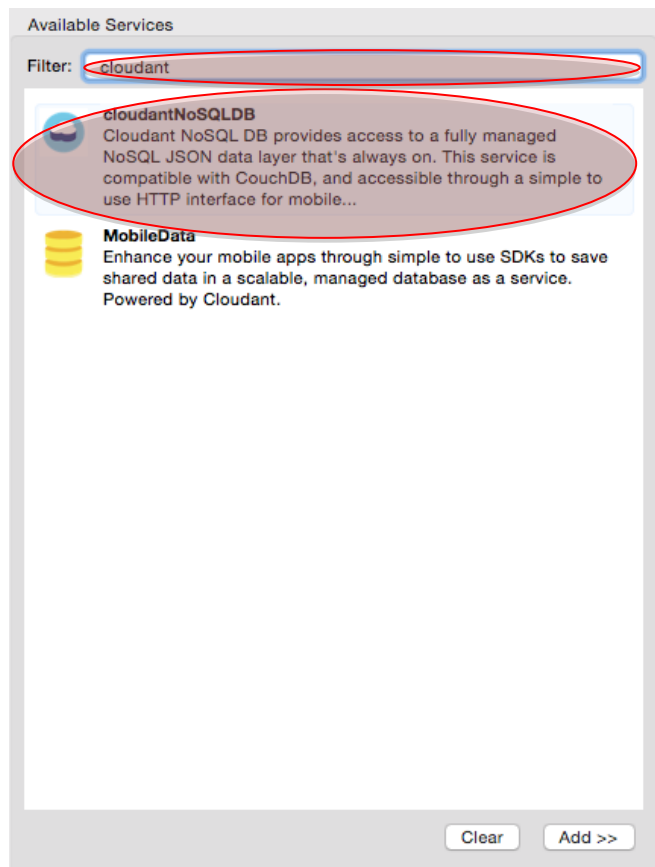
19. Click **Finish**.

20. In the Deploy dialog, change the application name to something unique. Click **Next**. Ensure that the URL contains a string that will be unique and then click **Next**.

21. On the Services selection window, click the **Add a Service** () icon to add a service.

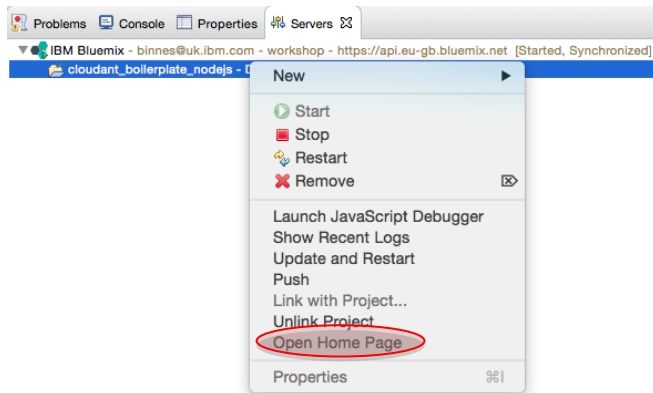


22. When the list of available services is shown, select the **CloudantNoSQLDB** service.



23. Click **Finish** and **Finish** again to close the application Deploy dialog.

The application is now being deployed to Bluemix. Eclipse should automatically switch to the Console view where you see details of the deployment.



24. After the application is running, switch to the Server view and expand the **Bluemix** server. You should see the application in the list. Start the application from Eclipse by right-clicking the application in the Servers view and clicking **Open Home Page**.

Tip: In Eclipse, you can change the browser that's used to start applications by clicking **Window > Web Browser** and selecting your preferred browser.

25. Remove the sample document from the database to allow the application to create it when the database launches. In the Bluemix web UI, select the Cloudant Service instance and then launch the Cloudant Dashboard.

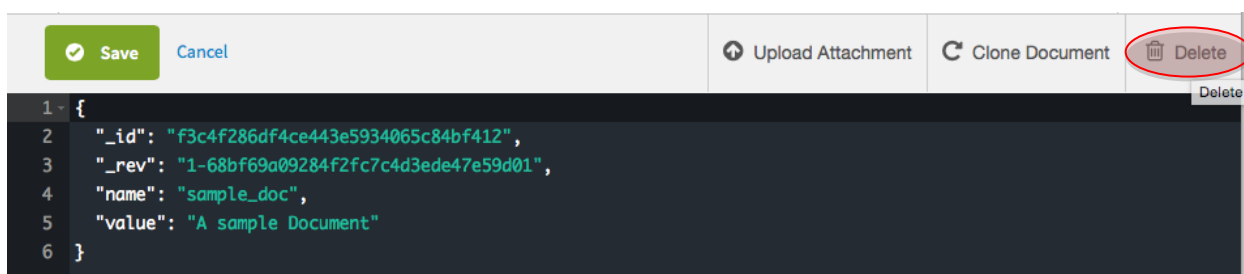
Cloudant NoSQL DB

LAUNCH

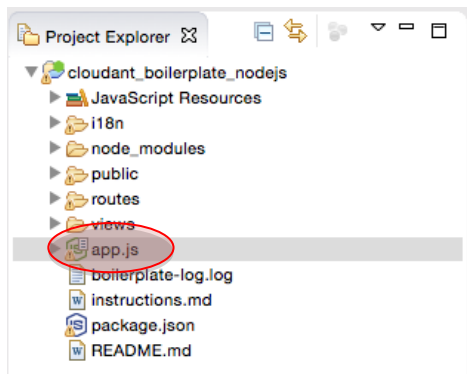
You should see a single database:

Databases					Database name	Add New Database	API URL
Your Databases							
Name	Size	# of Docs	Update Seq	Actions			
my_sample_db	89 bytes	1	1				

26. Select the database and then delete the document. Confirm the deletion.



27. In a text editor, open the file `app.js`:



28. Modify the name of the file, the file description and value (lines 306, 307, and 310) to replace `sample` with `test`:

```

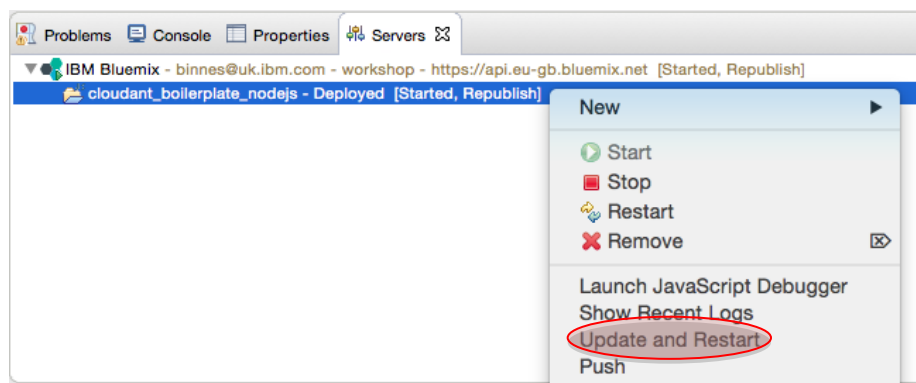
303     if(len == 0) {
304         //push sample data
305         // save doc
306         var docName = 'test doc';
307         var docDesc = 'A test Document';
308         db.insert({
309             name : docName,
310             value : 'A test Document'
311         }, '', function(err, doc) {

```

29. Save the changes by clicking **File > Save**.

Notice in the Server view that the state of the Bluemix server has changed to **republish**, which means that an application has changed. However, the application has not yet been published to Bluemix.

30. Select the **cloudant_boilerplate_nodejs** application in the Server view and right-click and click **Update and Restart**.



31. After the application is restarted, test the application to ensure that the change is now live.

After the project has been tested, the application can be deleted to release resources for future exercises.

32. Right-click the project in the Explorer view and click **Delete** to delete the project. Delete project contents on disk and then click **OK**.

You are asked whether you want to delete the cloudbantNoSQLDB service. Select the checkbox to delete the service. In the Bluemix web UI, confirm that the application and server have been deleted.

Important: Deleting a project that is deployed through Eclipse also deletes it from Bluemix.