

Setup Guide of a BlueMix Demonstration for a Human Resources Outreach Demo

The source code for the demo is available via git from a Github repository located at <https://github.com/CodenameBlueMix/bluemix-hr-outreach>

To checkout the code run the following command

```
git clone https://github.com/CodenameBlueMix/bluemix-hr-outreach.git
```

which should download roughly 19MB worth of demo code and assets into a bluemix-hr-outreach directory.

Modify the manifest.yml file in the bluemix-hr-outreach directory to replace the string bluemix-hr-outreach with your desired application name. Note that BlueMix will attempt to register a URL with a suffix ng.bluemix.net for you (e.g. node-linkedin-js-12345.ng.bluemix.net) which means that you must ensure that your hostname is unique.

This document will use the <HOSTNAME> string in place of your hostname AND application name in the examples. You will need to replace the string when following the instructions.

Since your demo is going to be using LinkedIn API, your application will have be whitelisted with LinkedIn. To do that, register a LinkedIn Application and specify your URL as a valid JavaScript domain on the LinkedIn Developer site.

Open the following link from your browser, login using your IBM ID and click on “Create a new client”. <https://idaas.ng.bluemix.net/idaas/developer/manageoauthclients.jsp>

Leave client identifier and client secret as <auto> and type in LinkedInOutreach for the Display Name
[https:// <HOSTNAME>.ng.bluemix.net/](https://<HOSTNAME>.ng.bluemix.net/) for the Redirect URI

A sample screenshot is shown below.

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Registered OAuth Clients for osipov@us.ibm.com

Number of clients: 1

Display Name	Client Id	Client Secret	Enabled	Operation
Bluemix	t924BQuPB4DXbQfGNvhz	Tkawmn9yMHwm2UUhqjcb	true	Edit Delete

[Create a new client](#)

Create Client

Client Identifier

Client Secret

Display Name

Redirect URI

Enabled ☒

[Submit](#) [Cancel](#)

Check off the “Enabled” box. Click Submit. Note the generated values for client ID and secret as they will be referenced as <SSO_CLIENT_ID> and <SSO_CLIENT_SECRET> at later time.

The demo code saves LinkedIn profiles into a Cloudant database. You can choose to create your own Cloudant database for the profiles or rely on a shared database for testing. It is strongly recommended that you create your own Cloudant database for demos because doing so will ensure that you will not encounter unexpected content from the database during the demos.

If you choose to create your own Cloudant database, you will need to perform the following steps to use it in the demo.

Ensure that you have a registered account on cloudant.com and note your Cloudant URL which is usually your username followed by cloudant.com. Replace <CLOUDANT_URL> in this documentation with this value.

Login to cloudant.com and make sure you are using the new dashboard.

From the databases menu, click on Add New Database and specify a name. When following this documentation replace <CLOUDANT_DATABASE> with the name you specified.

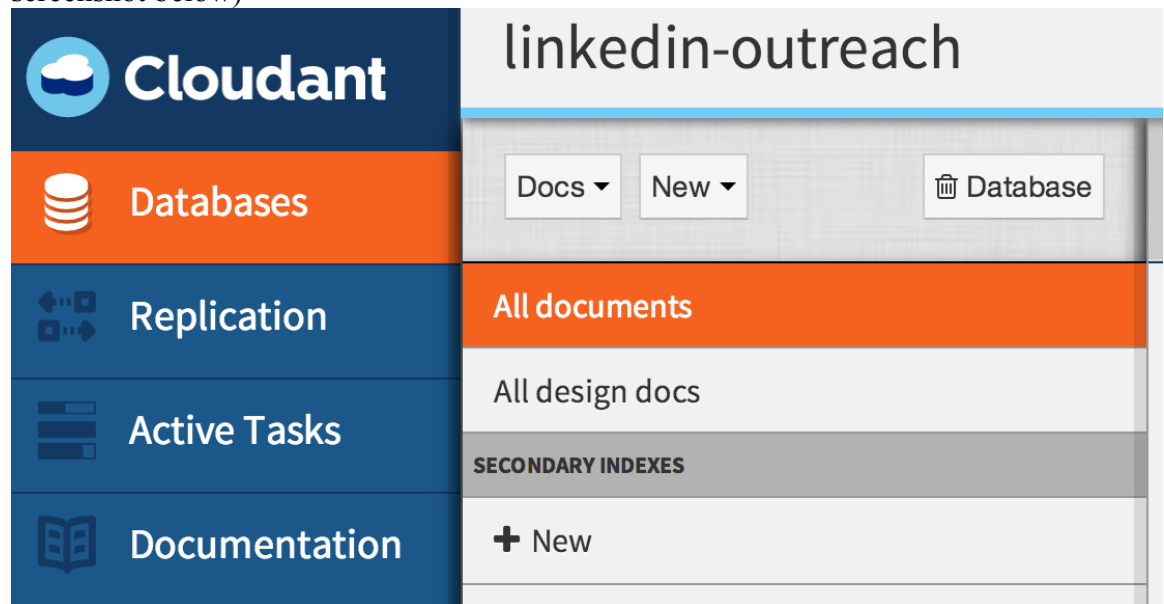
Click on the little lock icon to the right of the database name to set permissions.

Check off Reader rights for “Everybody Else”

Click on Generate API Key and make a note of the key and password values. When following this documentation, replace <CLOUDANT_USERNAME> and <CLOUDANT_PASSWORD> with these values.

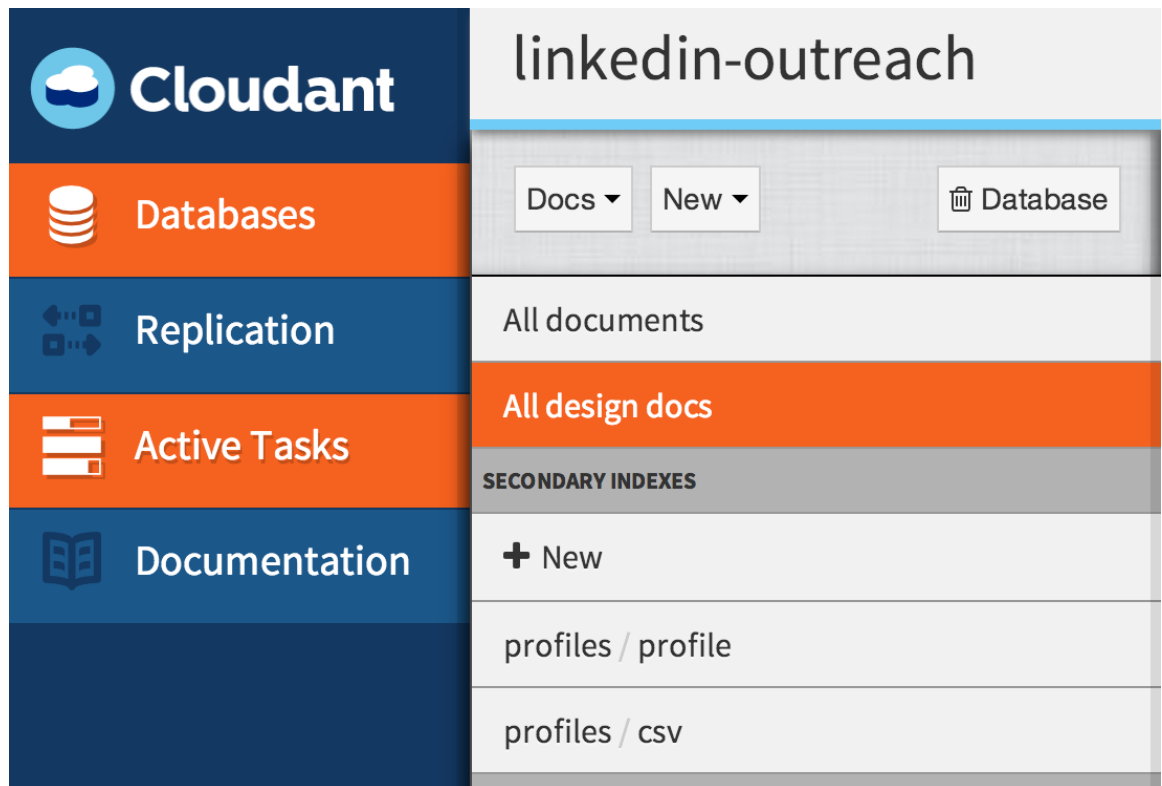
Check off Writer rights for <CLOUDANT_USERNAME>

Go back to the databases menu and click on your database (example on screenshot below)



Click on New dropdown and choose Document. In the opened editor, replace the content with the content of the _design.json file located in your node-linkedin-js-v9 directory. Save the changes.

Note that your database screen should now show new secondary indexes: profiles/profile and profiles/csv

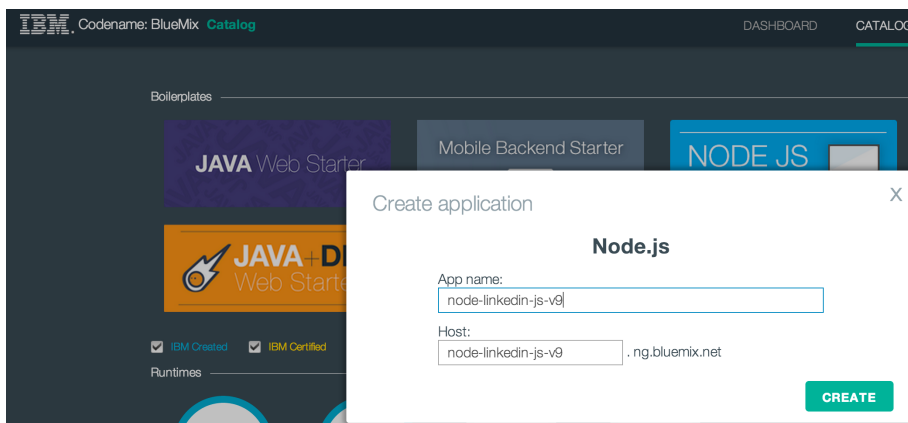


To create your BlueMix application

Login to the BlueMix portal using your IBM ID at www.bluemix.net

From the Bluemix catalog, click on Node.js runtime and click Create App

Specify the app and host names using the <HOSTNAME> value for both (see example below)



Navigate to the Dashboard view and click on your application named <HOSTNAME>

Click on Add new service

If you chose to use your own Cloudant database

Select Cloudant in the service catalog, click on Add to application and fill in values using <CLOUDANT_URL> / <CLOUDANT_DATABASE> (e.g. <https://osipov.cloudant.com/crud>) as well as <CLOUDANT_USERNAME> and <CLOUDANT_PASSWORD>

Click on Create.

Go back to the application to add another service

Click on SSO, Add to application. Choose your application name and click Create.

Navigate back to the Dashboard. Click on your application and on the left sidebar menu choose runtime.

Scroll all the way to the bottom of the screen and confirm the presence of VCAP_SERVICES that should look similar to the screenshot below.

Environment Variables

VCAP_SERVICES

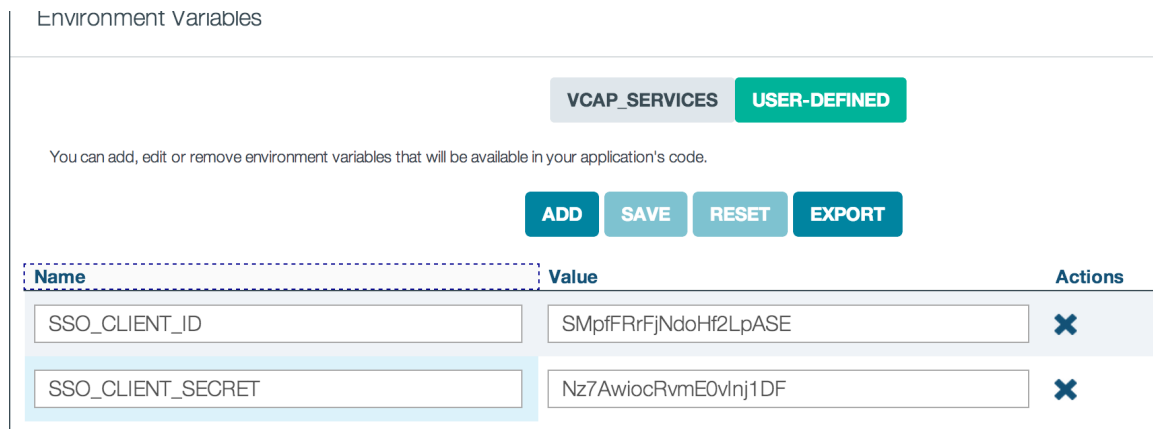
USER-DEFINED

VCAP_SERVICES is a read-only environment variable that contains information you can use in code to connect to your services.

```
{
  "user-provided": [
    {
      "name": "Cloudant JSONDB-4u",
      "label": "user-provided",
      "credentials": {
        "url": "https://osipov.cloudant.com/hr-outreach-v1",
        "username": "iefoukabornesislestesso",
        "password": "BhnEmHV0TNuqLFmLssucLn5E"
      }
    }
  ],
  "SSO-1.0": [
    {
      "name": "SSO-61",
      "label": "SSO-1.0",
      "plan": "free",
      "credentials": {
        "profile_resource": "https://idaas.ng.bluemix.net/idaas/resources/profile.jsp",
        "tokeninfo_resource": "https://idaas.ng.bluemix.net/idaas/resources/tokeninfo.jsp",
        "token_url": "https://idaas.ng.bluemix.net/sps/oauth20sp/oauth20/token",
        "authorize_url": "https://idaas.ng.bluemix.net/sps/oauth20sp/oauth20/authorize",
        "openidProviderURL": "https://idaas.ng.bluemix.net/idaas/openid"
      }
    }
  ]
}
```

Note that if you chose not to use your own Cloudant database, the corresponding section of the VCAP_SERVICES will be missing.

Click on the USER-DEFINED button which is next to VCAP_SERVICES. Using the Add button, create two variables named SSO_CLIENT_ID and SSO_CLIENT_SECRET with values <SSO_CLIENT_ID> and <SSO_CLIENT_SECRET> respectively. An example is shown on the screenshot below



Environment Variables

VCAP_SERVICES USER-DEFINED

You can add, edit or remove environment variables that will be available in your application's code.

ADD SAVE RESET EXPORT

Name	Value	Actions
SSO_CLIENT_ID	SMpfFRrFjNdoHf2LpASE	✕
SSO_CLIENT_SECRET	Nz7AwioCRvmEOvInj1DF	✕

Save the changes.

Return back to the console (terminal) and change your directory to node-linkedin-js-v9

To deploy the code to BlueMix, execute the following command from the terminal

```
cf push -n linkedin-hr-outreach-$RANDOM -c 'node main.js'
```

The code should successfully deploy and the application should start.

Validate that the application is working by browsing to <http://<HOSTNAME>.ng.bluemix.net> You should see a screen similar to the one on the screenshot below. Other application URLs include
<http://<HOSTNAME>.ng.bluemix.net/profiles>
<http://<HOSTNAME>.ng.bluemix.net/admin>
<http://<HOSTNAME>.ng.bluemix.net/dashboard>
<http://<HOSTNAME>.ng.bluemix.net/dashboard#a>

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Wait for the LinkedIn button on the upper right to show up and
login with your LinkedIn account