

Part C: Connect IBM Cloud Services to Cloud Foundry Applications

Estimated time needed: 30 minutes

Lab Overview

In this hands-on lab, you will connect IBM Cloud services with your Cloud Foundry application. This will make the service credentials available to your application as environment variables.

Objectives

After completing this lab, you will be able to:

1. Connect IBM Cloud services to your Cloud Foundry application.

Lab Instructions






This lab is broken up into the following tasks:











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Open Application page

Navigate to <https://cloud.ibm.com/resources> to launch your resources page. You should see your Cloud Foundry application that you created in the last lab. Click on the application to open the settings page.











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Resource list

Create resource +

Name	Group	Location	Status	Tags
<div><div>Filter by name or IP address...</div><div>Filter by group or org... </div><div>Filter... </div><div>Filter... </div><div>Filter... </div></div>				
Devices (0)				
VPC infrastructure (0)				
Clusters (0)				
Cloud Foundry apps (1)				
 movies-reviews-database-38a	cloudappdevs@gmail.com / dev	Dallas	 Started	— :
Cloud Foundry services (0)				
Services (2)				
 cloudappdevs-cloudant	Default	Dallas	 Active	— :
 cloudappdevs-nlu	Default	Dallas	 Active	— :
Storage (0)				
Network (0)				
Cloud Foundry enterprise environments ..				
Functions namespaces (0)				

FEEDBACK

Click on the **Connections** tab and then **Create connection**

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[Resource list](#) /

movies-reviews-database-38a

Running

[Visit App URL](#)

Add tags

[Details](#)

Actions...

Getting started

Overview

Runtime

Connections

Logs

API Management

Autoscaling

Q

Filter items

Create connection

+

Name	Type
<div></div> <div>No connections</div> <div>No connected resources. Create a connection to bind this app to another resource.</div>	

FEEDBACK

Connect the cloudant service to the application

You should see both Cloudant and Natural Language Understanding services on

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movies-reviews-da

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Search resources...

Name	Group	Location
<input checked="" type="radio"/> cloudappdevs-cloudant	Default	Dallas
<input type="radio"/> cloudappdevs-nlu	Default	Dallas

Cancel

Next

Confirm the access role in the next screen. You can leave everything as default. You also informed at this time that the application will need to restaged, which required a restart.

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Create connection

To connect, you can customize the ServiceID and access role used for this binding. Restaging your app is required to connect this service and may result in application downtime.

Access Role for Connection

Manager

Service ID for Connection (Optional)

Auto Generate

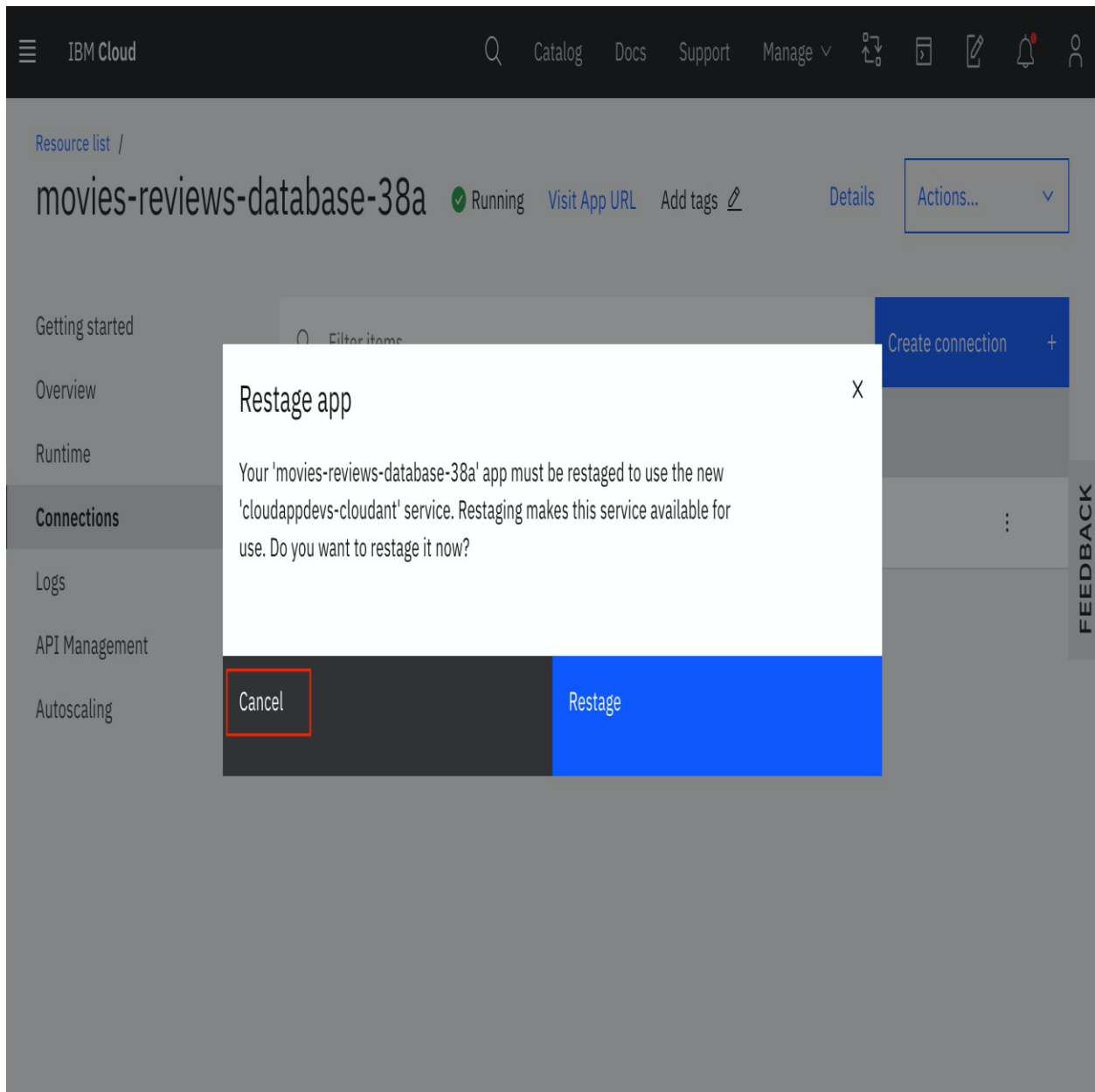
Restaging Required

Connecting this service may take your app temporarily unavailable for use.

X

CancelConnect






You now have an option to restage the application. Select **Cancel** as we will connect NLU service before restaging.




Connect the NLU service to the application

You are taken back to the connections page. You should see your Cloudant service instance listed as a connected service. Let's repeat the steps for the Natural Language Understanding service by selecting **Create connection** again.

IBM Cloud

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Resource list /

movies-reviews-database-38a ✔ Running [Visit App URL](#) [Add tags](#)  [Details](#)

Actions... ▾

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Q Filter items

Name	Type	
 cloudappdevs-cloudant	Cloudant	⋮

Create connection +

FEEDBACK

Pick your instance of the Natural Language Understanding service and select **Next**.

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Search resources...

Name	Group	Location
<div><div><div></div></div>cloudappdevs-nlu</div>	Default	Dallas

Cancel

Next

Confirm the access role in the next screen. You are again informed that your application will need to be restaged.

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X

To connect, you can customize the ServiceID and access role used for this binding. Restaging your app is required to connect this service and may result in application downtime.

Access Role for Connection

Manager ▾

Service ID for Connection (Optional)

Auto Generate ▾

Restaging Required
Connecting this service may take your app temporarily unavailable for use.

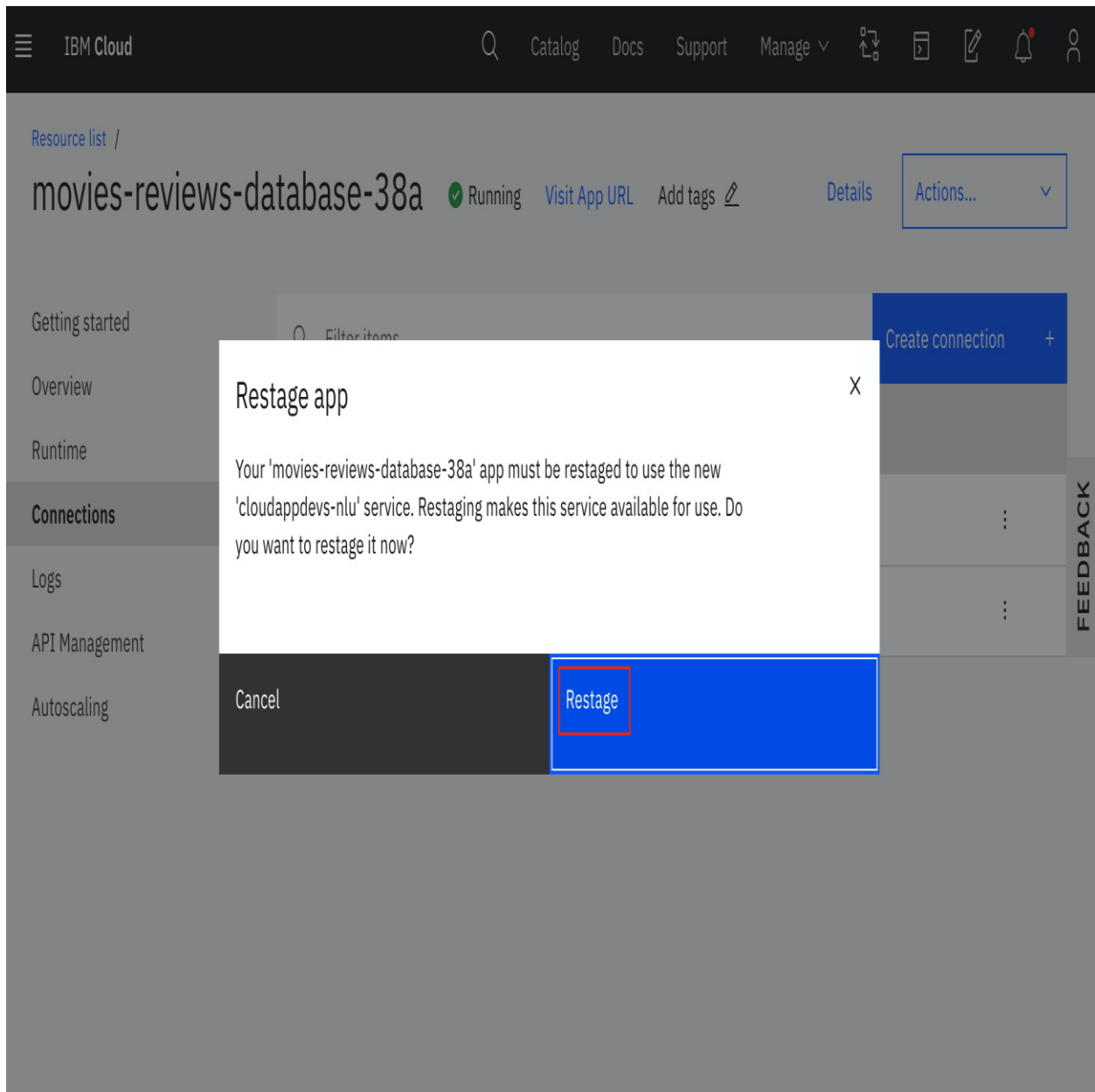
X

Cancel

Connect






Restage the application

Let's restage the application at this time.






You should see the application is being **restaged** and hence the URL is inactive.

IBM Cloud

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Resource list /

movies-reviews-database-38a  Restaging [Visit App URL](#) [Add tags](#)  Details

Actions... 

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Filter items







Create connection 

Name	Type	
 cloudappdevs-cloudant	Cloudant	
 cloudappdevs-nlu	Natural Language Understanding	




FEEDBACK

Once the restage has finished, the application status should change to **Running** and the **Visit App URL** link should be active again.

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Resource list /

movies-reviews-database-38a  Running [Visit App URL](#) Add tags  Details [Actions...](#) 

Getting started

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
Create connection 










Name	Type	
 cloudappdevs-cloudant	Cloudant	
 cloudappdevs-nlu	Natural Language Understanding	

FEEDBACK

Take a screenshot of this page and save it as **connections.jpg**. You will be asked to upload it for the final project grading. The screenshot must show both the Cloudant and the Natural Language services connected with your application as shown above.


You can also see the service credentials are now available in the runtime section of the page. Click on **Runtime** and the **Environment Variables**.

 IBM Cloud


 Catalog  Docs  Support  Manage     

[Resource list](#) /


movies-reviews-database-38a

 Running

[Visit App URL](#)

[Add tags](#) 

[Details](#)

[Actions...](#) 

Getting started

Memory and instances

Environment variables

SSH

Overview

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Default variable

VCAP_SERVICES 

```
{
  "natural-language-understanding": [
    {
      "label": "natural-language-understanding",
      "provider": null,
      "plan": "free",
      "name": "cloudappdevs-nlu",
      "tags": [
        "ibm_created",
        "ibm_dedicated_public",
        "lite",
        "watson",
        "ibmcloud-alias"
      ],
      "instance_name": "cloudappdevs-nlu",
    }
  ]
}
```

[Show more](#) 

 **FEEDBACK**

Congratulations! You connected IBM Cloud services to your Cloud Foundry application.