

Predictive Modeling Fundamentals I

Lab 5: Deployment of your model on IBM Bluemix

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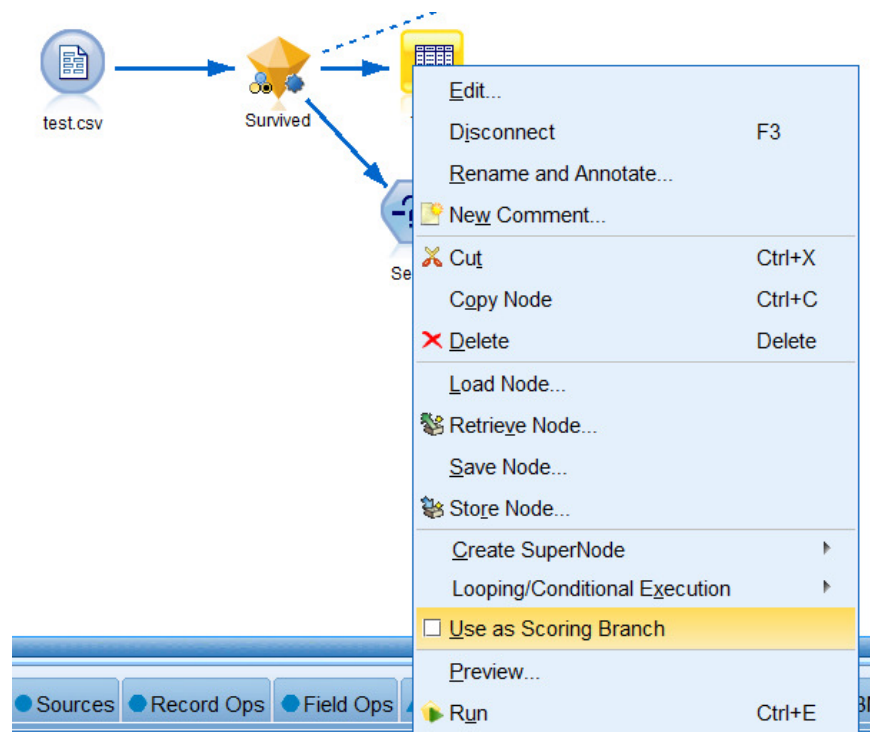
Deployment of your model on IBM Bluemix

In this lab you will upload the Stream to IBM Bluemix to convert your model into a consumable API. Then we will use our model in a real time application.

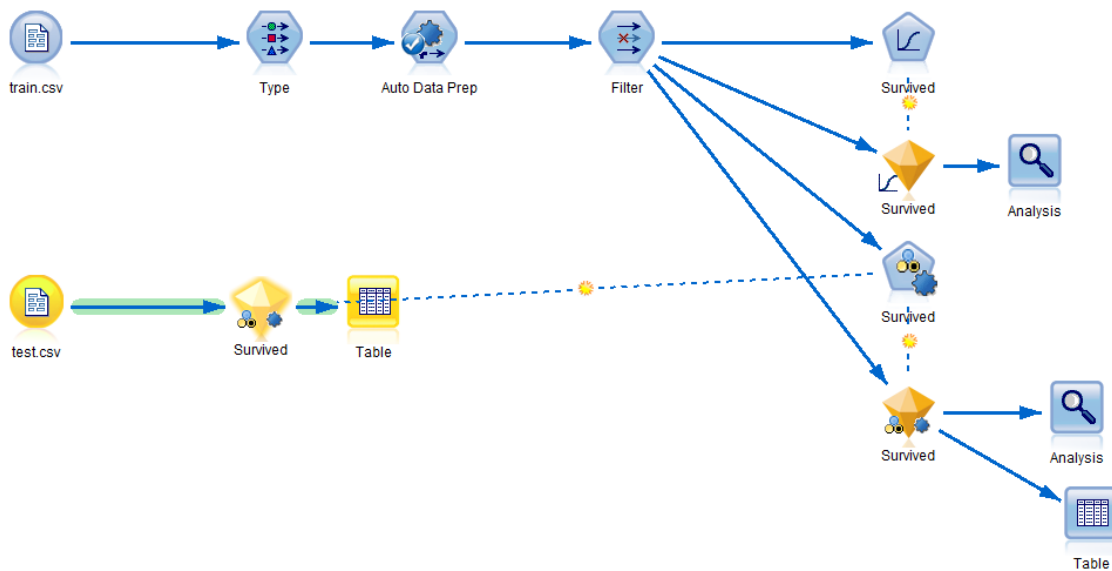
1.1 Getting your stream ready

If you are deploying a stream, one branch of the stream must be designated as the **scoring branch** (that is, the one containing the scoring node). When you designate a branch as the scoring branch, that branch is highlighted on the stream canvas, as is the model link to the nugget on the scoring branch. This visual representation is particularly useful in complex streams with multiple branches, where the scoring branch might not be immediately obvious.

_1. Select the **Table** node connected to your model in the scoring branch and right click on it. Select the option **Use as Scoring Branch**.



The scoring branch in the stream should be now highlighted:



_2. Save the Stream on your Desktop by click **File** -> **Save Stream**. Put any name you wish, for example **TitanicModel.str**

1.2 Getting started with IBM Bluemix

_1. Go to <http://bluemix.net> and **Log In** with your IBM ID if you already have an account. If not, click on **Sign Up**. It is **free** and it takes 30 seconds!

IBM

IBM id

One key, many possibilities.

Your IBM id provides access to services, communities, support, online purchasing, and much more.

Create IBM id

Sign in

armand.ruiz@us.ibm.com

.....

[Forgot password?](#)

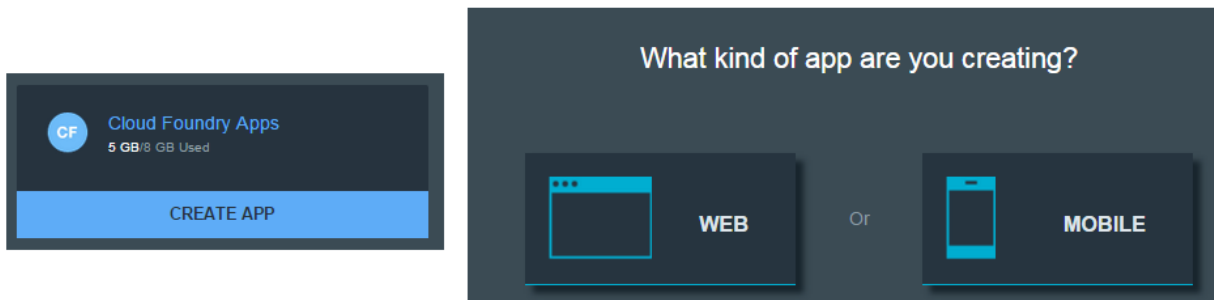
Sign in

_2. You are now in the main **IBM Bluemix Dashboard**. Here you can find all the information of all the Applications and Cloud Services attached to your account. Unless you've used IBM Bluemix before, it should be empty.

1.3 Create an application on Bluemix

We need to create an application on Bluemix. We won't focus on the application development though so don't worry about it now.

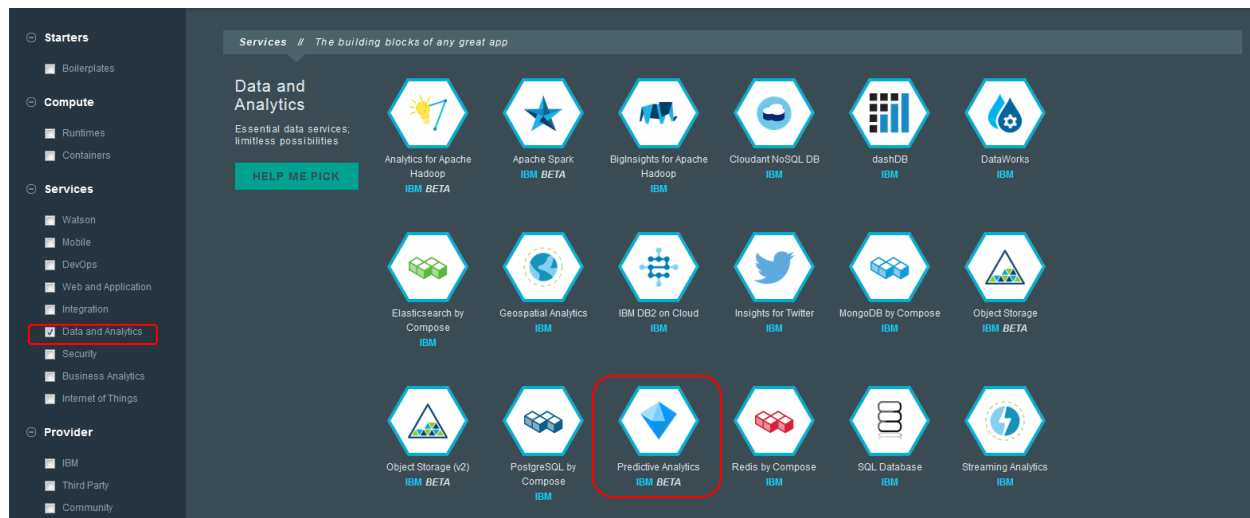
_1. Click on **Create App** button in the dashboard, then select **Web** and **Liberty for Java**, click Continue.



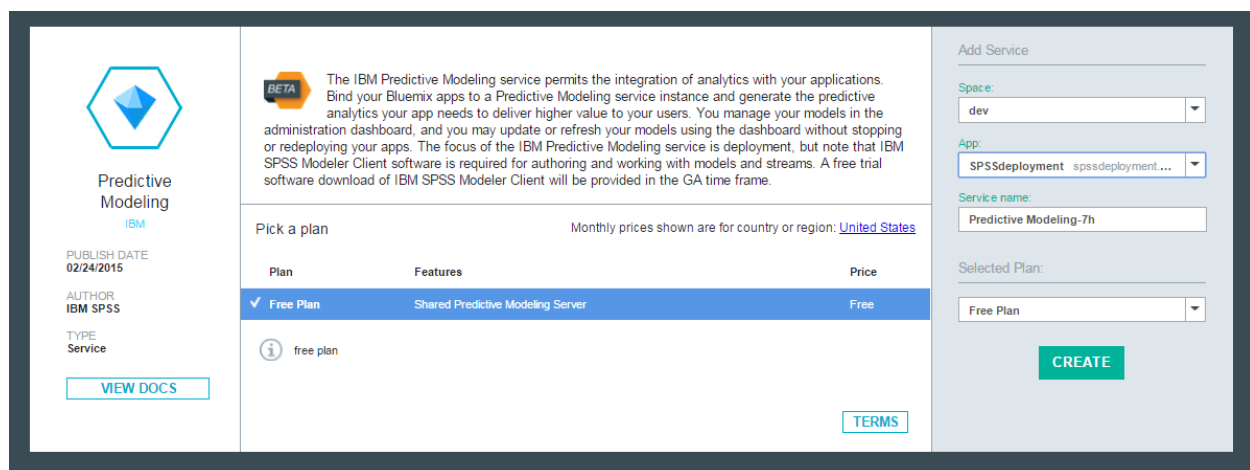
_2. Put a name for your app and click **Ok**. Your application will appear in the Bluemix dashboard.

1.4 Deploy the SPSS model

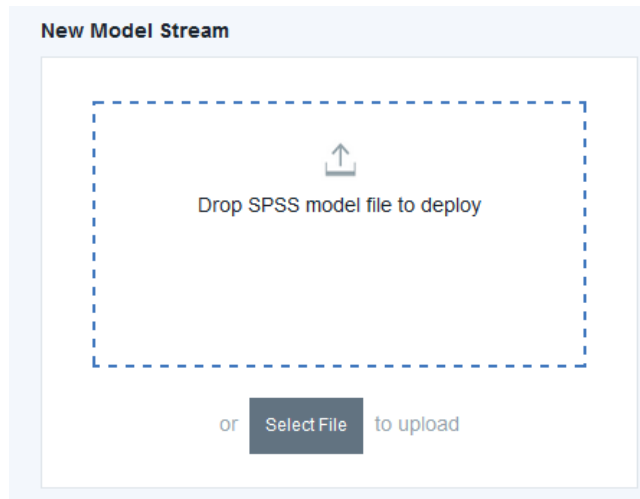
_1. Click on the **Catalog** button on the top menu. There are many different IBM Cloud services. Search of the **Predictive Modeling** service under the category **Data and Analytics**.



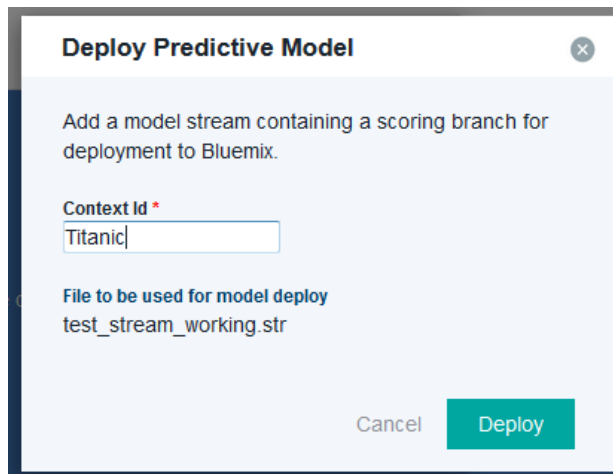
_2. Click on the **Predictive Modeling** and in the **App** option select the app that you previously created. Click on **Create**. Your service will be ready in some seconds.



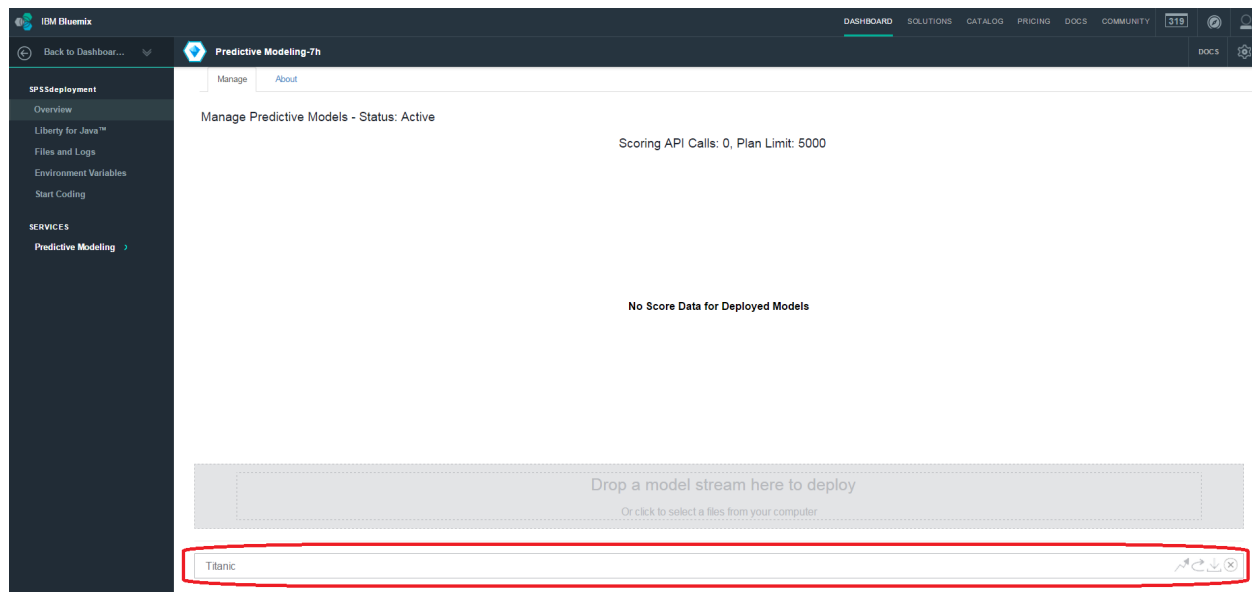
_3. Your Predictive Modeling service should open automatically. In case it is not opening you can find it available in your Bluemix dashboard. Upload the SPSS stream by drag and dropping the file in the grey area or selecting the file on your computer.



_4. Specify the **Context ID** for the deployed stream, for example **Titanic**.



_5. Check that your model appears as available.



1.5 Testing the deployed model

We created an application so you can test the deployment in a real-time application.

_1. Go to <http://spsstraining.mybluemix.net/>

_2. In this application you have a menu on the left with some input parameters to define a passenger of the Titanic.

Titanic Survival Prediction
Context

Select the characteristic of the passenger :
Sex
☒ Male
☐ Female
Age
 0 100
Class
☐ First
☒ Second
☐ Third
Fare
 1 100
Family size
 1 15
Number of Siblings on board
 0 10
SPSS API URL:

contextID:

accessKey:

Prediction according to the SPSS deployed model

There is a probability of **Error: Couldn't resolve host name** % that this passenger would have **Error: Couldn't resolve host name**

This sample application is powered by:

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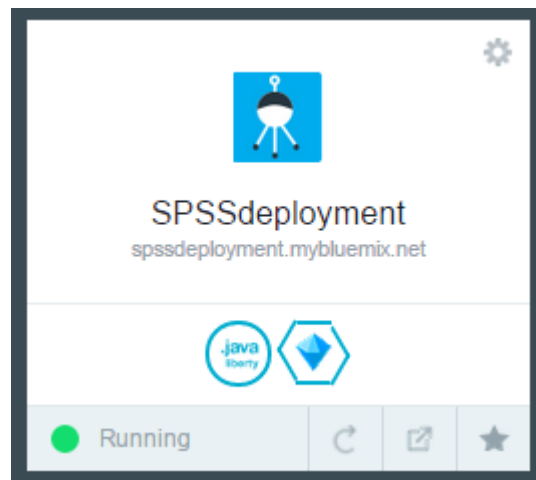
Developed by:

Armand Ruiz – Product Manager SPSS
 @armand_ruiz

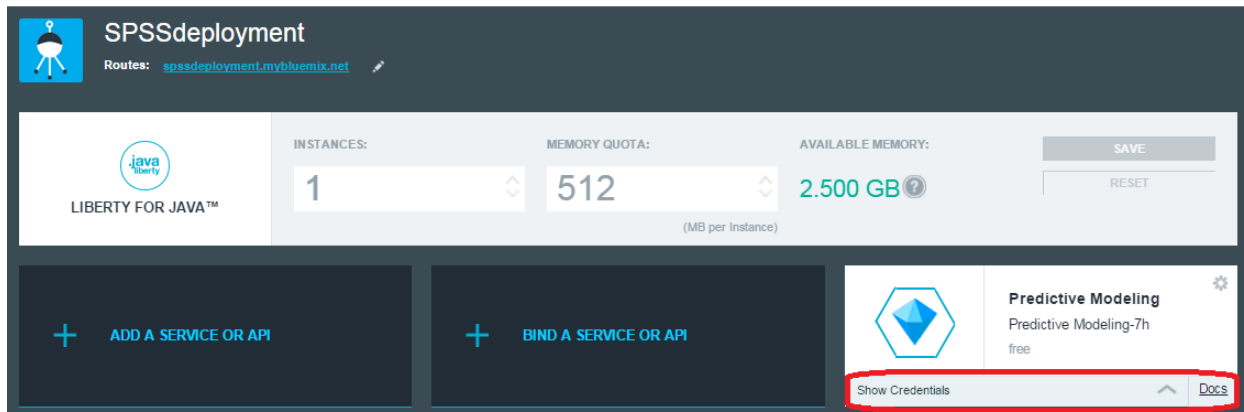
Mikhail Lakirovic – Product Marketing Manager SPSS
 @mlakiro

You see to red warning messages on the main page, that's because you need to put all the information on the left menu before.

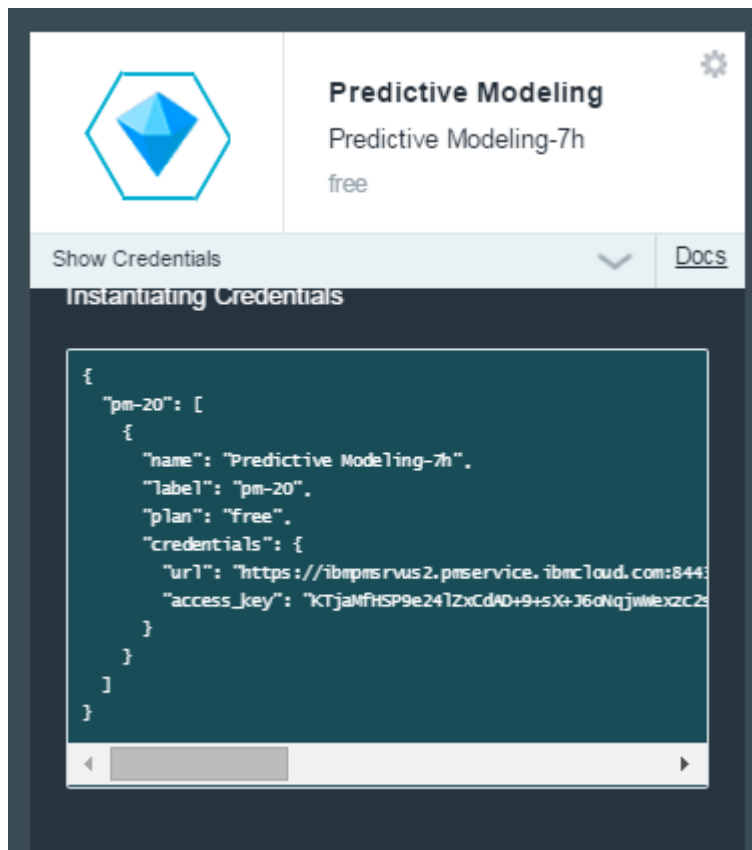
_3. Go back to the Bluemix Dashboard and click in the application that you created previously. In my case the application was called SPSSDeployment



_4. In the **Overview** page of the application, click on **Show Credentials** of the **Predictive Modeling** service.



_5. You will get here 3 fields that you need for the application, the **url** and the **access_key**.



_6. Back to the <http://spsstraining.mybluemix.net/> copy/paste the **url**, **access_key** and **context_id** in the fields.

SPSS API URL:

contextID:

accessToken:

_7. Click submit and you will see how you will get a prediction based on the Input parameters:

Prediction according to the SPSS deployed model

There is a probability of **92.9** % that this passenger would have **Died**

Adjust the different parameters and you will see how the results change!

Summary

Congratulations! You deployed your first predictive model in the Cloud!

In this lab you learnt how to deploy a SPSS Model in IBM Bluemix using the Predictive Modeling service. Then you tested the model in a real time application. In this application you select the characteristics of a specific passenger of the Titanic and then you get the prediction based on the SPSS Model.