


Lab 1 – Alchemy Image Analysis

1 Overview

The Alchemy Vision service allows to analyze the contents of an image and extract features from it. The Face Detection service is able to identify multiple faces within the image, and determine their gender and age with a confidence score, and identify celebrities.

2 Which Node-RED node gets used here

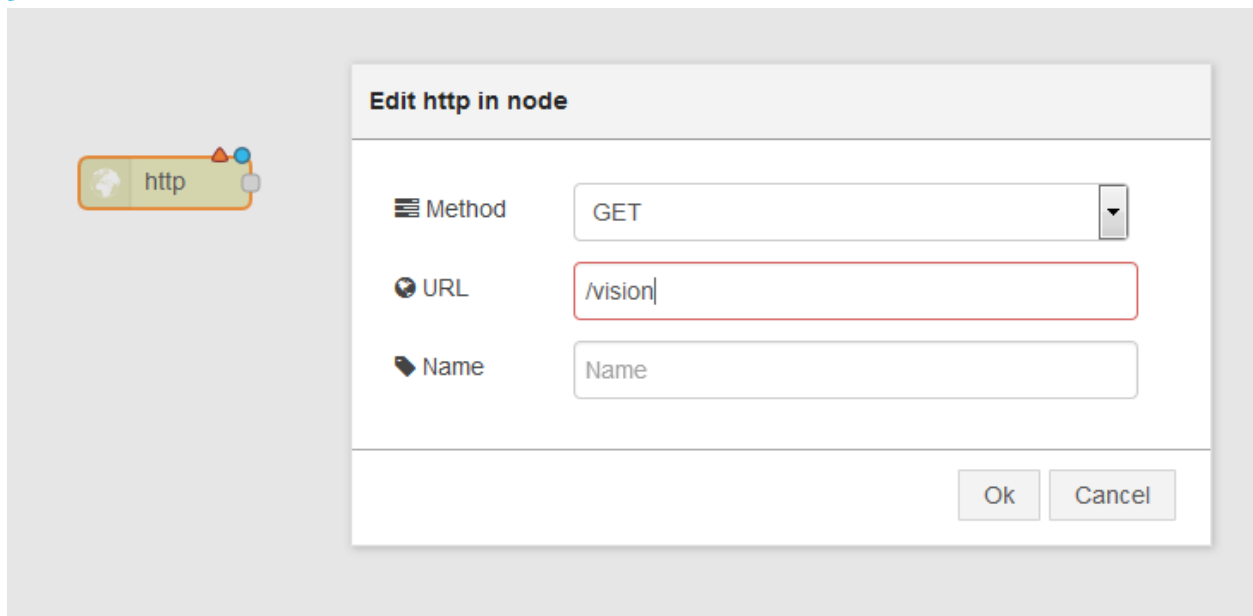


The Node-RED  node provides a very easy wrapper node that takes an image URL or binary stream as input, and produces a array of detected faces , age, bounding box, gender and name.

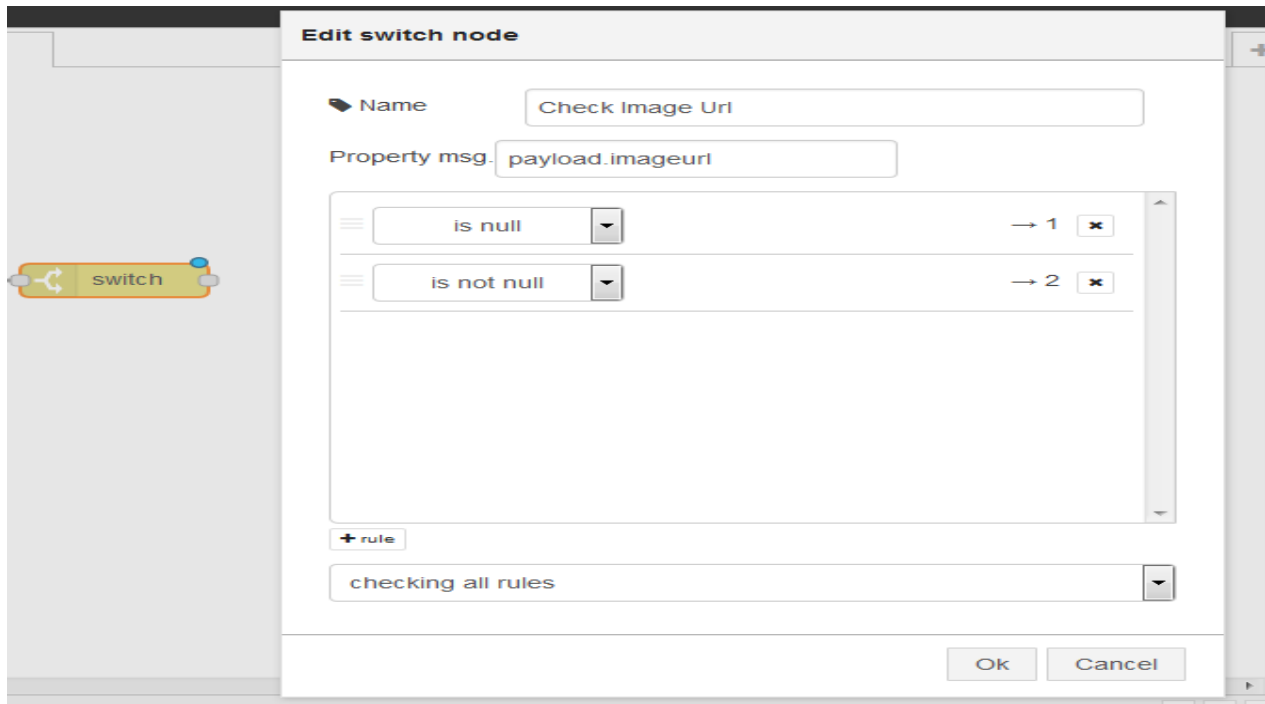
3 Steps to Create

There are 7 steps to create the whole flow.

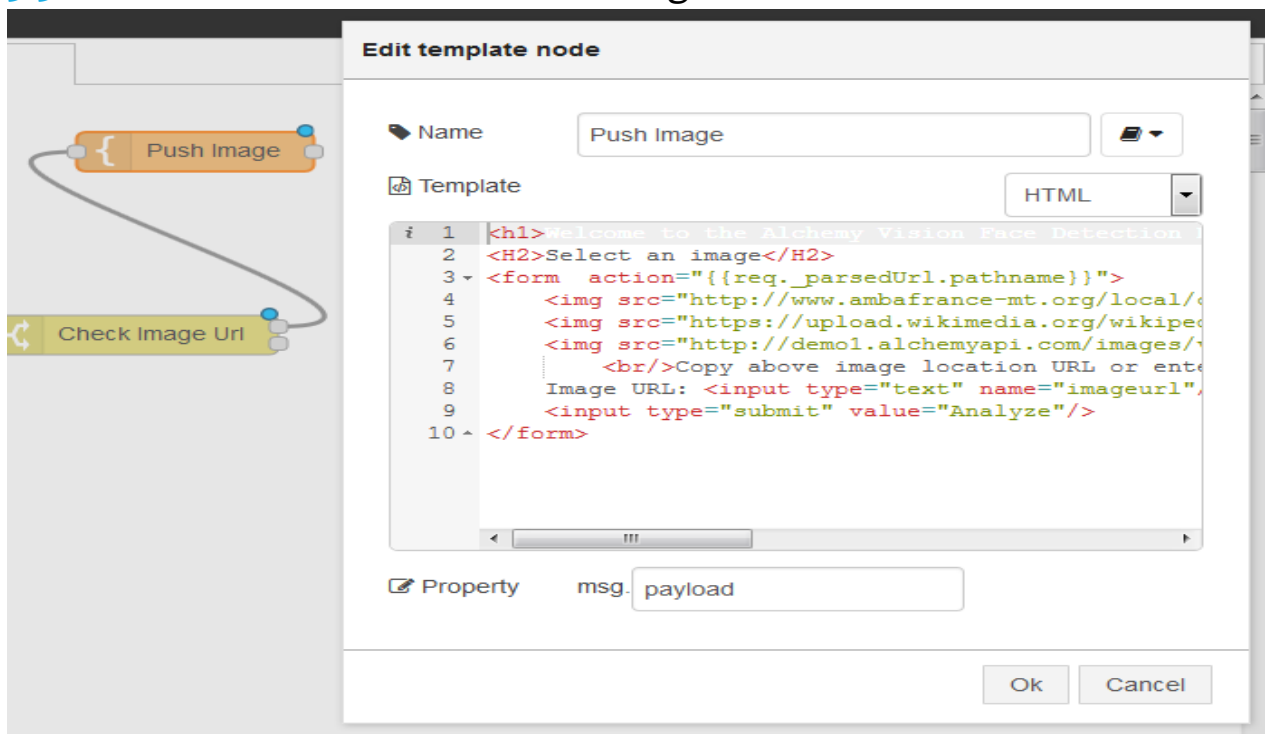
3.1 Add a HTTP node



3.2 Add a SWITCH node and configure as below



3.3 Add a TEMPLATE node and configure as below



Copy the below HTML and paste here

```
<h1>IBM ECOD LAB 1</h1>
```

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```

<H2>Select an image</H2>
<form action="{{req_parsedUrl.pathname}}">
  
  
  
  <br/>Copy above image location URL or enter any image URL:<br/>
  Image URL: <input type="text" name="imageurl"/>
  <input type="submit" value="Analyze"/>
</form>

```

3.4 Add a CHANGE node to convert variables

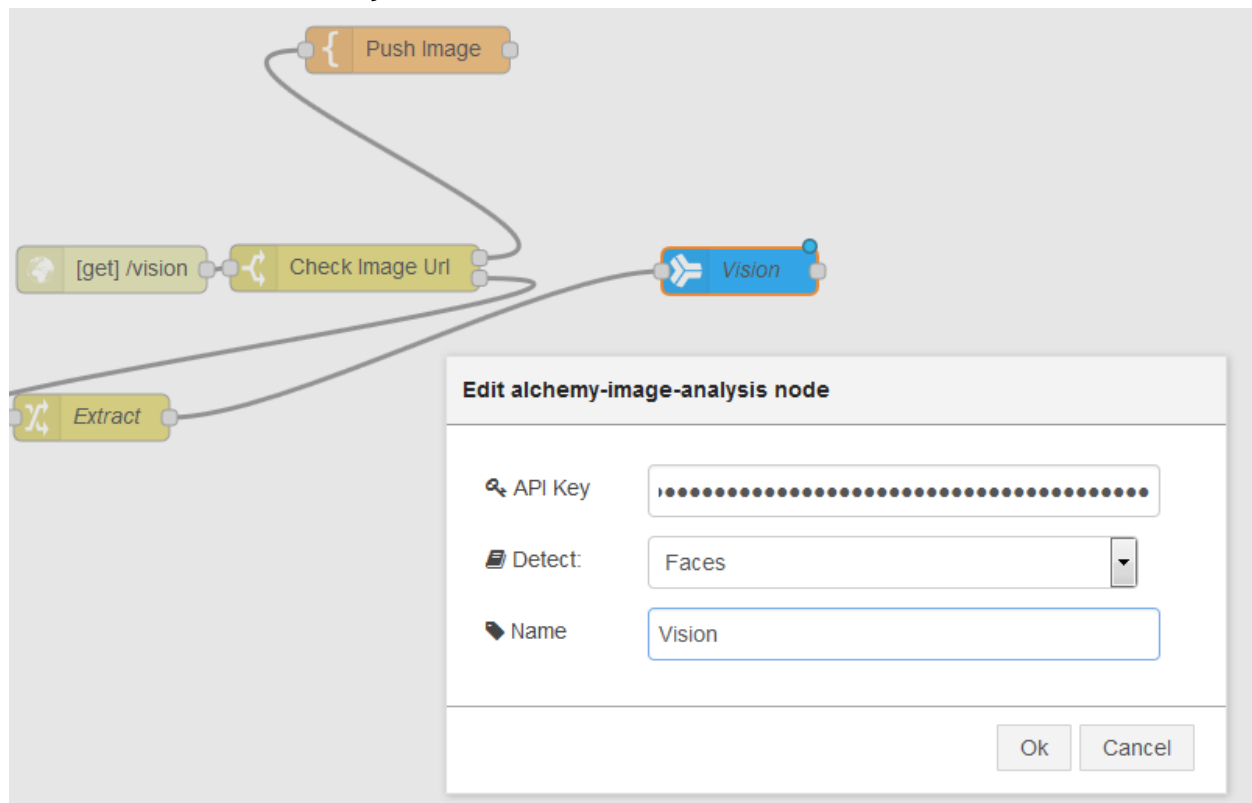
The screenshot shows the IBM Bluemix Watson Studio interface. On the left, a workflow titled "Alchemy Lab 1" is visible. It contains several nodes: a "[get] /vision" node, a "Check Image Url" node, a "Push Image" node, and an "Extract" node. The "Extract" node is highlighted, and its configuration dialog is open on the right.

The "Edit change node" dialog has the following fields:

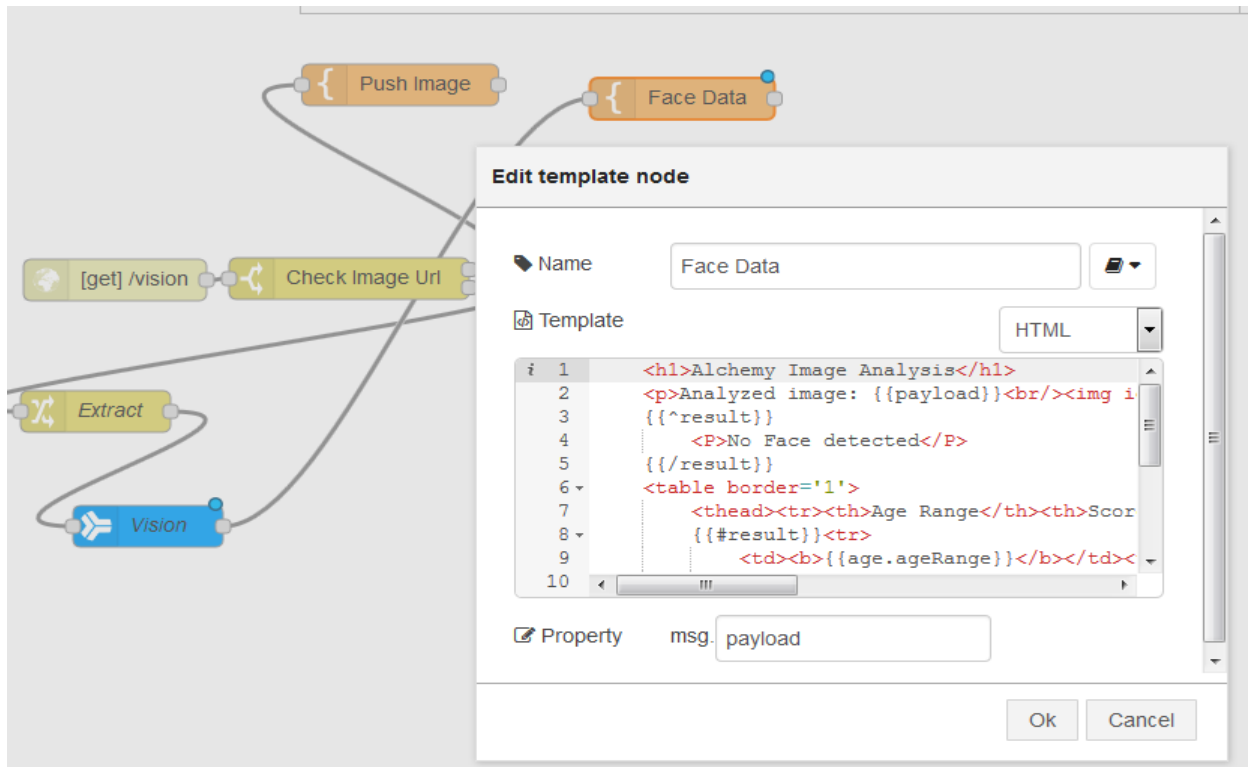
- Name:** Extract
- Rules:**
 - Set msg.payload to msg.payload.imageurl

At the bottom of the dialog, there is a "+ rule" button and "Ok" and "Cancel" buttons.

3.5 Add the Alchemy IMAGE ANALYSIS node



3.6 Add another TEMPLATE and configure as below



Copy the below HTML and paste here

```
<h1>IBM ECOD LAB 1</h1>

<p>Analyzed image: {{payload}}<br/></p>

{{^result}}

<p>No Face detected</p>

{{/result}}

<table border='1'>

<thead><tr><th>Age
Range</th><th>Score</th><th>Gender</th><th>Score</th><th>Name</th></tr></thead>

{{#result}}<tr>

<td><b>{{age.ageRange}}</b></td><td><i>{{age.score}}</i></td>

<td>{{gender.gender}}</td><td>{{gender.score}}</td>

{{#identity}}<td>{{identity.name}} ({{identity.score}})</td>{{/identity}}

</tr>{{/result}}

</table>

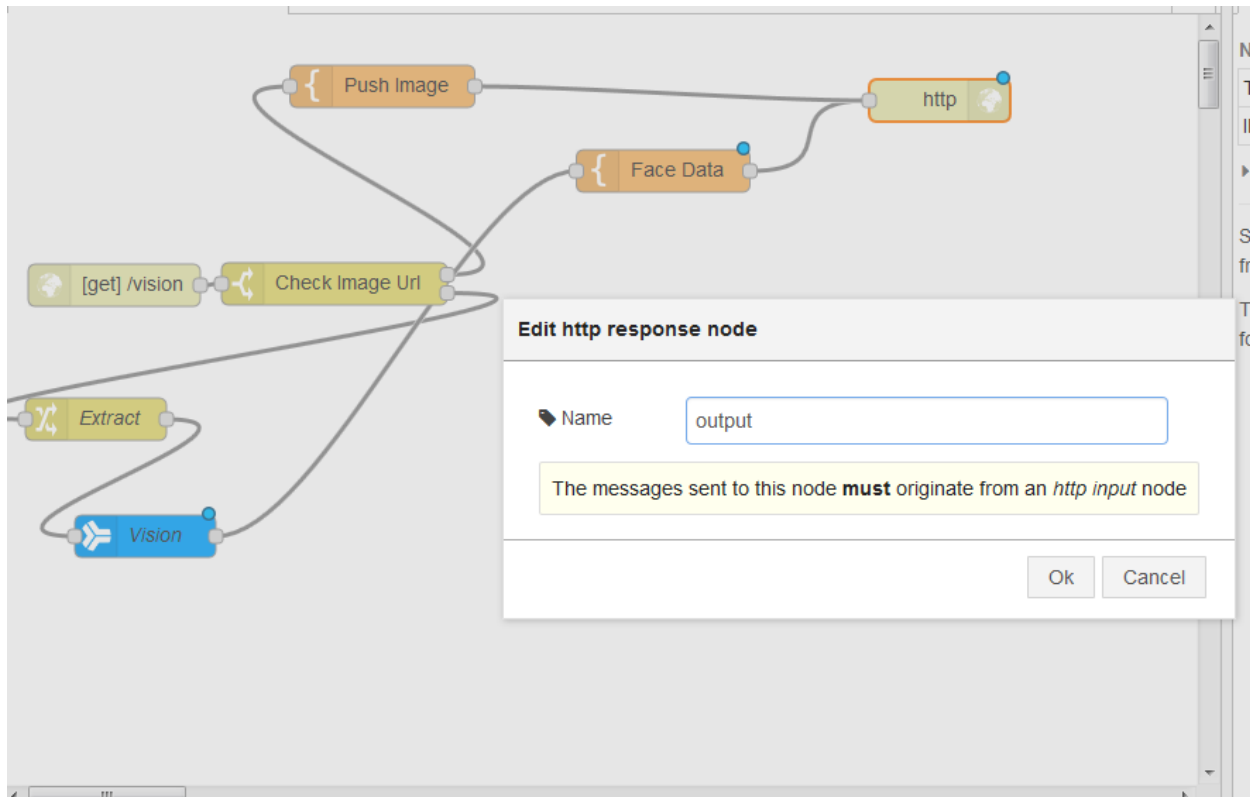
<form action="{{req._parsedUrl.pathname}}">
```

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```
<input type="submit" value="Try again"/>
```

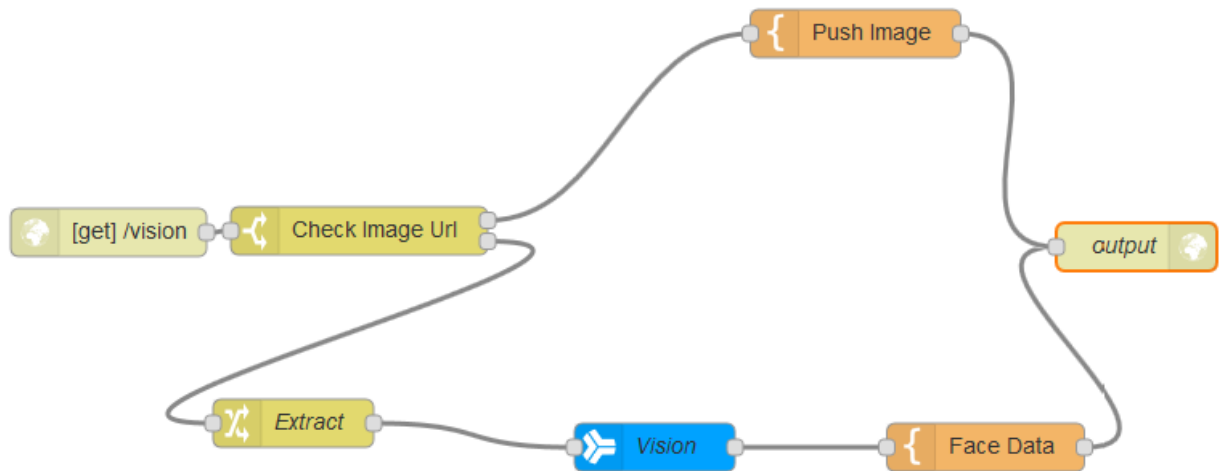
```
</form>
```

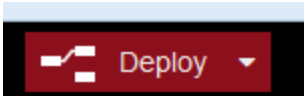
3.7 Add a HTTP RESPONSE node and modify its name



4 Steps to see Output

4.1 Verify that flow looks as below



4.2 Deploy this flow using the  button

4.3 See the output using the app url <Your App Name>.mybluemix.net/vision