

Lab 12-1

Lab – Create the Robot

You will be creating a Robot that goes to a Post Office web site, enters address information and outputs one set of corrected data including address detail along with latitude and longitude coordinates. In Lab 13, you will call a REST Web Service made from this Robot to output all of this information for every HardyHardware store location within a given state.

1. Before you develop your Robot, go to the Post Office web site using your browser and note how you accomplish this search. Go to <http://class.kofax.com/Postal/Zipcode.php> in your web browser.
2. Enter the following information:
 - a. Address: 1350 Macarthur Road
 - b. City: Whitehall
 - c. State: PA
 - d. Zip 18052
3. Press [Submit]
4. Note the information returned. This is the information you will want your robot to extract and return.
5. Create a new Robot called “zipWebService.robot” under the HardyHardware Project. Use the following URL: <http://class.kofax.com/Postal/Zipcode.php>. For this robot, select the “Classic” browser engine. *NOTE: This is only required if you are using the Kofax Kapow 10.2.0.0 release. If you have installed the latest fix pack, you may use the “Default” browser engine.*
6. Under the HardyHardware project, in the Types folder, create a new Type called “StoreAddress.” Set up Attributes as follows:

Name	Storage Name	Attribute Type	Default Value	Storable	Required	Part of Database Key
Storename		Short Text		✓		✓
Address		Short Text		✓		
city		Short Text		✓		
State		Short Text		✓		
zip		Short Text		✓		
lat		Number		✓		
longi		Number		✓		

7. Click on the zipWebService.robot tab to return to the robot view.
8. Create a new Variable using the “StoreAddress” Type. Make sure to check “Use as input variable.” Provide the four input test values (address, city, state and zip) shown in step 2 above.

TECHNICAL TRAINING LAB INSTRUCTIONS

9. Your first four steps – following the “Load Page” step – will be to enter text for the four fields you just provided values for. Click on the empty “Address” box in the browser view to select it. Right mouse-click and select “Enter Text from Variable” and “StoreAddress.Address” from the context menu.
10. Provide similar steps for City, State and Zip. Note that for the State field, you will use **“Select Option from Variable”** rather than “Enter Text from Variable.” Your Robot should look like this:



11. With the end step selected, examine the Variables panel. You should see your test values populating the four fields.
12. The next thing you have to do is click on the [Submit] button. Click on [Submit] in the browser panel to select it. Then right mouse-click and select “Click” from the context menu.
13. Selecting the end step should display the results in the browser panel.
14. So now you want to extract that data. Set up Extract action steps for:
 - a. Address
 - b. City
 - c. State
 - d. Zip
 - e. Latitude
 - f. Longitude
15. Your Robot should now look like this:



16. And you should the following results in the Variables panel:

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TECHNICAL TRAINING LAB INSTRUCTIONS


The screenshot shows a 'Variables' window with a tab labeled 'StoreAddress'. On the left is a list of variables containing 'StoreAddress'. On the right, the details for 'StoreAddress' are shown, including its type 'StoreAddress' and a list of input fields: Storename, Address (1350 MACARTHUR RD), city (WHITEHALL), State (PA), zip (18052), lat (40.657236), and longi (-75.502468).

17. Finally add a Return Value step just before the end step.
18. Test your Robot in Debug Mode.
19. Save your Robot
20. Upload your Robot to the Management Console

Lab 12-2

Lab – REST Web Services

In this lab, you will test your Robot running as a REST web service.

1. Open the Management Console.
2. From the “Repository” tab, select the “Robots” tab and find your zipWebService robot,
3. Click on the REST icon  for that robot to display the request and response of a REST Web Service. You should see a window that looks like this:

The screenshot shows a window titled 'Service example. zipWebService.robot in Default project'. It has a 'REST URL' dropdown set to 'POST' and a text field containing 'http://localhost:50080/rest/run/Default project/zipWebService'. A 'Test Service' button is on the right. Below the URL bar are two panels: 'Request' and 'Response'. The 'Request' panel has a 'Format' dropdown set to 'XML' and shows an XML document structure for a REST request, including a variable named 'StoreAddress' with attributes for Storename, Address, city, State, zip, lat, and longi. The 'Response' panel also has a 'Format' dropdown set to 'XML' and is currently empty.

- Manually modify the text with your input test values for the four input fields so that it looks like this:

```
<attribute type= text name= Storename >input text</attribute>
<attribute type="text" name="Address">1350 Macarthur Road</attribute>
<attribute type="text" name="city">Whitehall</attribute>
<attribute type="text" name="State">PA</attribute>
<attribute type="text" name="zip">18052</attribute>
<attribute type="number" name="lat">40.657236</attribute>
```

- Then click on the [Test Service] button. Check the results. You should see the following:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<rest-result executionTime="1564">
  <values>
    <value typeName="StoreAddress">
      <attribute type="text" name="Storename">input text</attribute>
      <attribute type="text" name="Address">1350 MACARTHUR RD</attribute>
      <attribute type="text" name="city">Whitehall</attribute>
      <attribute type="text" name="State">PA</attribute>
      <attribute type="text" name="zip">18052</attribute>
      <attribute type="number" name="lat">40.657236</attribute>
      <attribute type="number" name="longi">-75.502468</attribute>
    </value>
  </values>
</rest-result>
```

Notice the address output is in capital letters (because this is how it's being returned from our Post Office web site for this record). Also notice latitude and longitude are returned.

- Close the Test Service window.
- We'll be using this REST service in the lab for Module 13. Leave the Management Console open and continue to Lab 12-3.

Lab 12-3

Lab – Kappzone and Kapplets

You will use the Kappzone to create a Kapplet. You'll publish the Kapplet and run it from your browser.

- Before you create your Kapplet, let's modify the appearance of the Kappzone.
- Go to the "Kapplets" tab in the Management Console and then click on the "Branding" tab.
- Select "Custom" for the branding color. Then click on "Drop logo here or click to upload" and select: "C:\Kapow Resources\Logo_EducationService1in.bmp." Click [Open].
- Set the "Brand Color" as follows: R **0**; G **120**; B **230**; or HEX **0078e6**. Set the "Contrast" to "Light."
- Now go to the "Kappzone" tab and click on the link to open the Kappzone.
- Click on the [ADD NEW KAPPLET] button.
- For the name, enter "Address Detail." For the project, accept "Default project."



TECHNICAL TRAINING LAB INSTRUCTIONS

8. Click on [CREATE KAPPLET]. You'll be taken to the "Edit Kapplet" page.
9. In the description box, enter "Returns corrected address detail along with latitude and longitude."
10. In the icon box, click on "Click here to browse for icon..." and navigate to C:\Kapow Resources\KofaxIcon.png. Select it by clicking on [Open].
11. Then go to the "NEXT STEP" by clicking on "the start page."
12. Click on the "Add Robots" graphic.
13. Then on the "Start Action" page, click on "Add New Robot."
14. Select the zipWebService robot by clicking it. You'll see a green checkmark added indicating it's been selected. Then click on [SELECT ROBOT].
15. In the INPUTS section of the displayed page, change "**Storename is**", "**lat is**" and "**longi is**" to "fixed value" and leave those values blank. They will be returned by the Robot. Leave the other four values set to "user input." An example of the settings follow:

INPUTS

StoreAddress (zipWebService) where

Storename is fixed value ▼

Address is user input ▼

city is user input ▼

State is user input ▼

zip is user input ▼

lat is fixed value ▼

longi is fixed value ▼

16. Click [OK].
17. Now select "STORE ADDRESS" from the page icons on the left of the page.
18. Click on the "Edit" tab.
19. Make sure checkboxes for ALL values are checked. These are the values that will display as results when you run your Robot.



TECHNICAL TRAINING LAB INSTRUCTIONS

20. Click [OK].
21. Click [APPLY CHANGES].
22. Publish your Kapplet by selecting the "Publish" toggle at the top of the page. Your Kapplet is now ready for use.
23. Test running your Kapplet. Go to the blue menu box in the top right corner of the web page and select "Kappzone" from the menu. The Kappzone page should be displayed. Your new Kapplet should be available.
24. Before you can run the Kapplet, it must be installed. Click on the [Install] button.
25. Now that your Kapplet's installed, click on [Open] button to run it.
26. Enter in your test address information:

**1350 Macarthur Road
Whitehall
PA
18052**

NOTE: We've noticed some issues with specific versions of the latest release of Internet Explorer allowing you to enter the values you need to. If you cannot enter all values, we suggest you try in Google Chrome or Mozilla Firefox.

27. Click on [Start Kapplet]. View the results by clicking on the "Result History" link on the right side of the web page.
28. Close Management Console.