

## TOC

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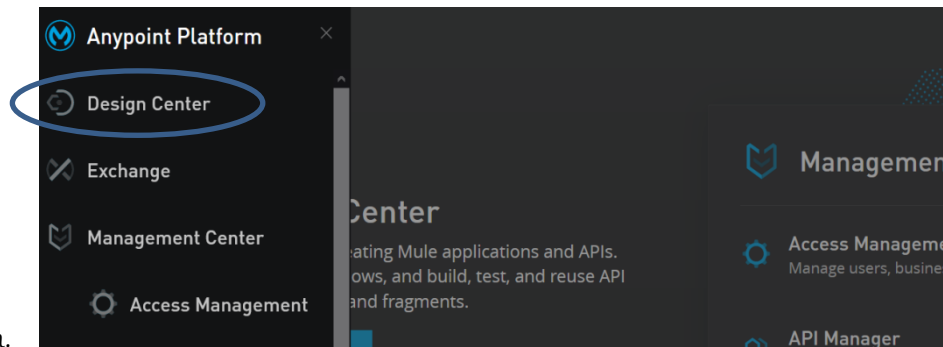
## LAB- Use Case

In this lab you will -

- a) Import RAML specifications of NewsAPI
- b) Publish API to Exchange
- c) Generate Flows from RAML Specification
- d) Test using POSTMAN

### Step 1 - Import RAML specifications of NewsAPI

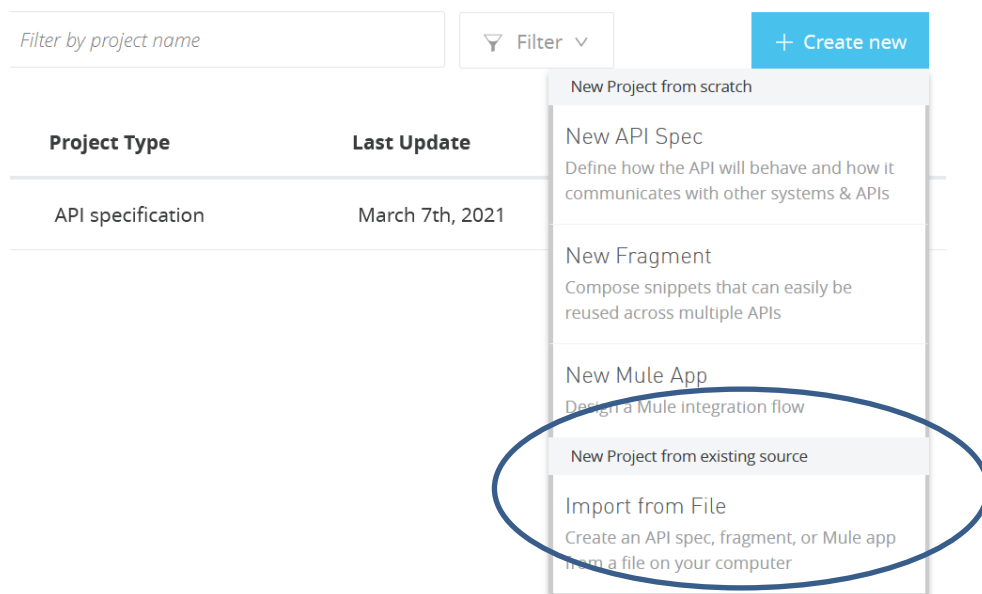
1. Download NewsAPI.zip file from the resources section
2. Go to anypoint platform
  - a. Link is <https://anypoint.mulesoft.com/login/signup>
  - b. Signup and create Account
3. Login to Anypoint platform using the username and password created using signup
  - a. <https://anypoint.mulesoft.com/login/>
4. After log-in, Click on the three bars on the left – top corner , this will open menu
5. Click on Design Center from Menu



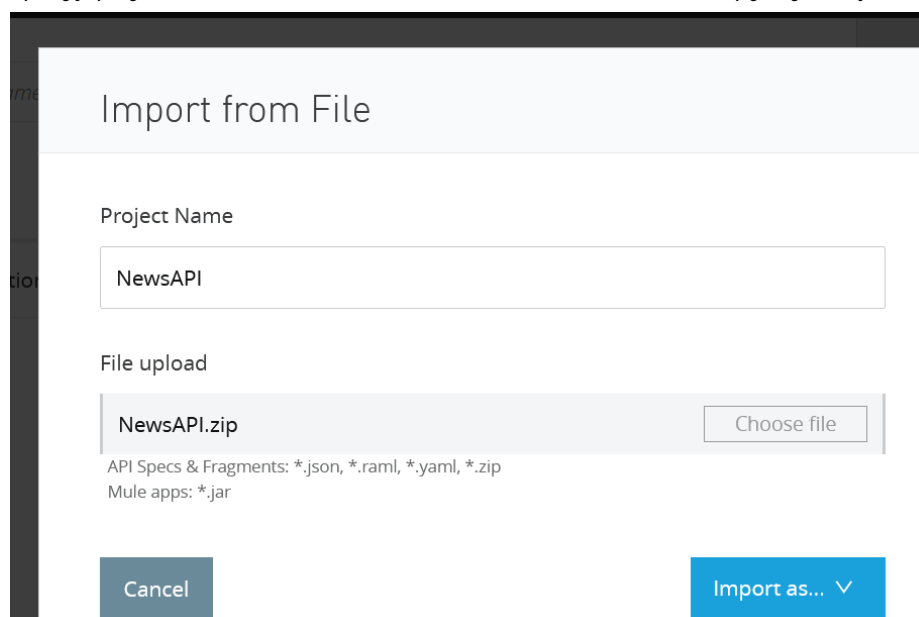
a.

6. In the design centre, we will use Import from file

a. Click on **Create new** button and then from the menu, click on **Import from File**



b. Specify project name as NewsAPI and choose the downloaded zip file from your directory



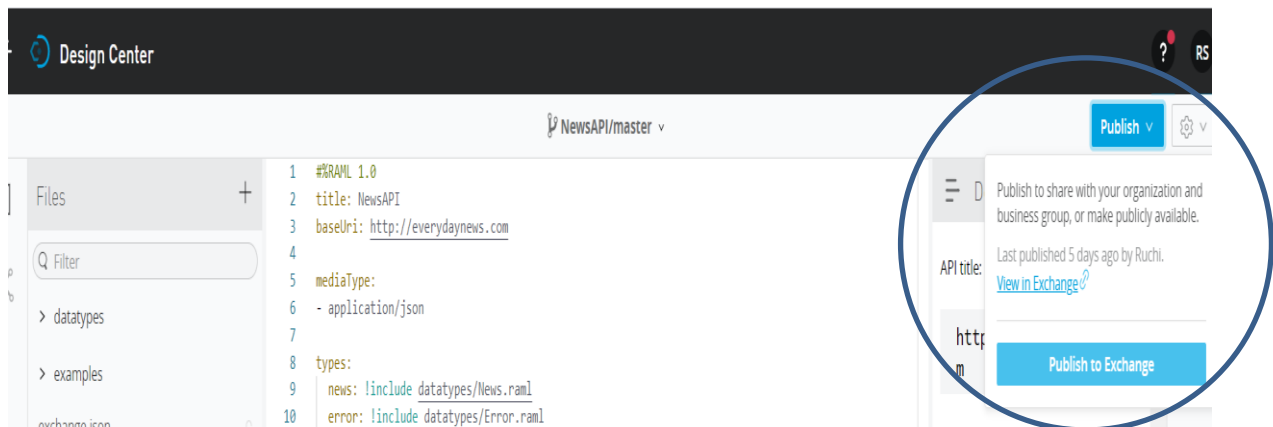
c.

- d. Click on **Import as API Specification**
- e. This will create your project using the selected zip file
7. Go through the RAML specifications and understand it . In case of any confusion, please refer the video.

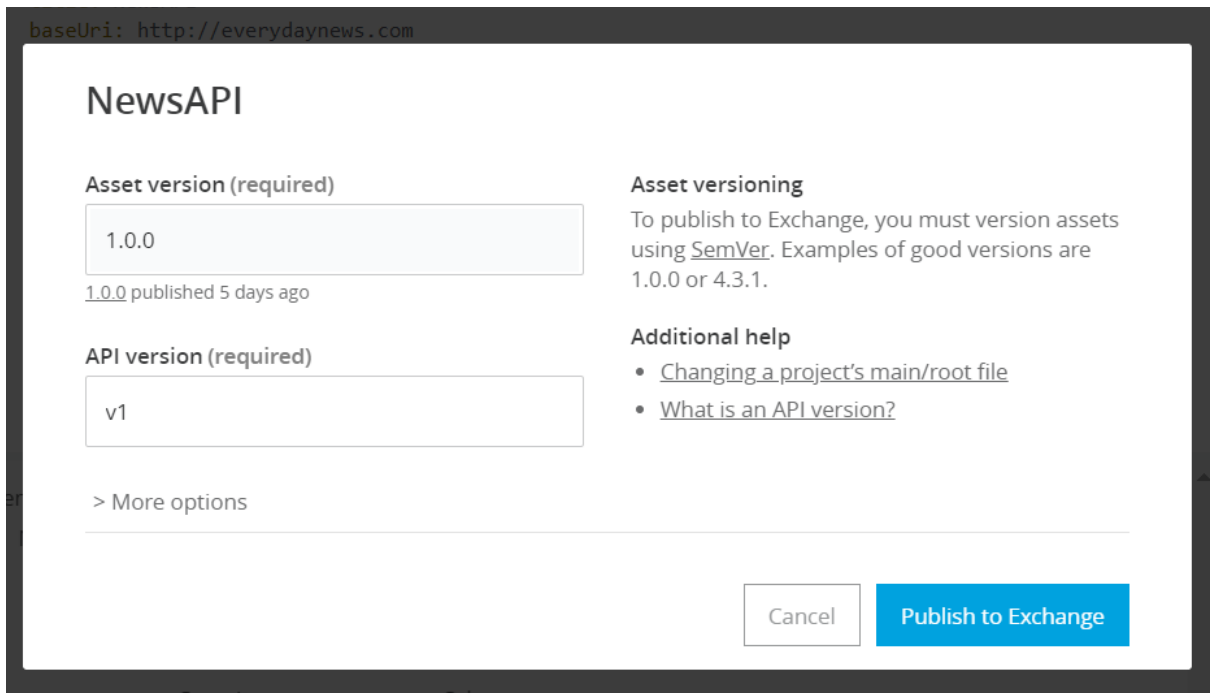
**Congratulations, you have completed step 1.**

### Step 2 – Publish to Exchange

1. After Importing RAML API specifications, we will click on Publish -> Publish to Exchange



2. A popup window will open and we will specify Asset Version and API version as shown below -



The screenshot shows a dialog box titled "NewsAPI" with a dark header bar containing the text "baseUri: http://everydaynews.com". The dialog has two main sections. The left section contains two input fields: "Asset version (required)" with the value "1.0.0" and a note "1.0.0 published 5 days ago", and "API version (required)" with the value "v1". Below these is a link "> More options". The right section contains the heading "Asset versioning" with explanatory text and examples, followed by "Additional help" with two bullet points: "Changing a project's main/root file" and "What is an API version?". At the bottom right are two buttons: "Cancel" and "Publish to Exchange".

baseUri: http://everydaynews.com

### NewsAPI

**Asset version (required)**

1.0.0

1.0.0 published 5 days ago

**API version (required)**

v1

> More options

**Asset versioning**

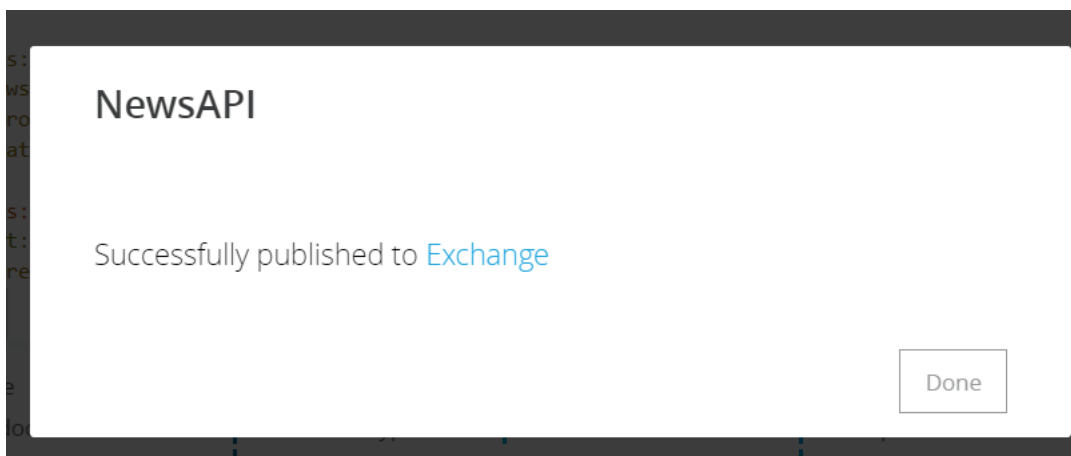
To publish to Exchange, you must version assets using [SemVer](#). Examples of good versions are 1.0.0 or 4.3.1.

**Additional help**

- [Changing a project's main/root file](#)
- [What is an API version?](#)

Cancel Publish to Exchange

Then Click on "Publish to Exchange", this action will publish your API to exchange and open another window



The screenshot shows a dialog box titled "NewsAPI" with a dark header bar. The main content area displays the text "Successfully published to Exchange" in a blue font. At the bottom right is a button labeled "Done".

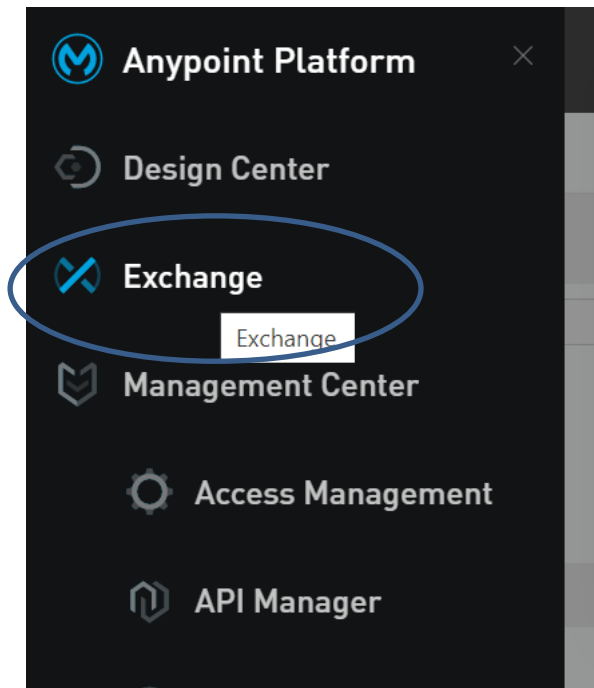
### NewsAPI

Successfully published to Exchange

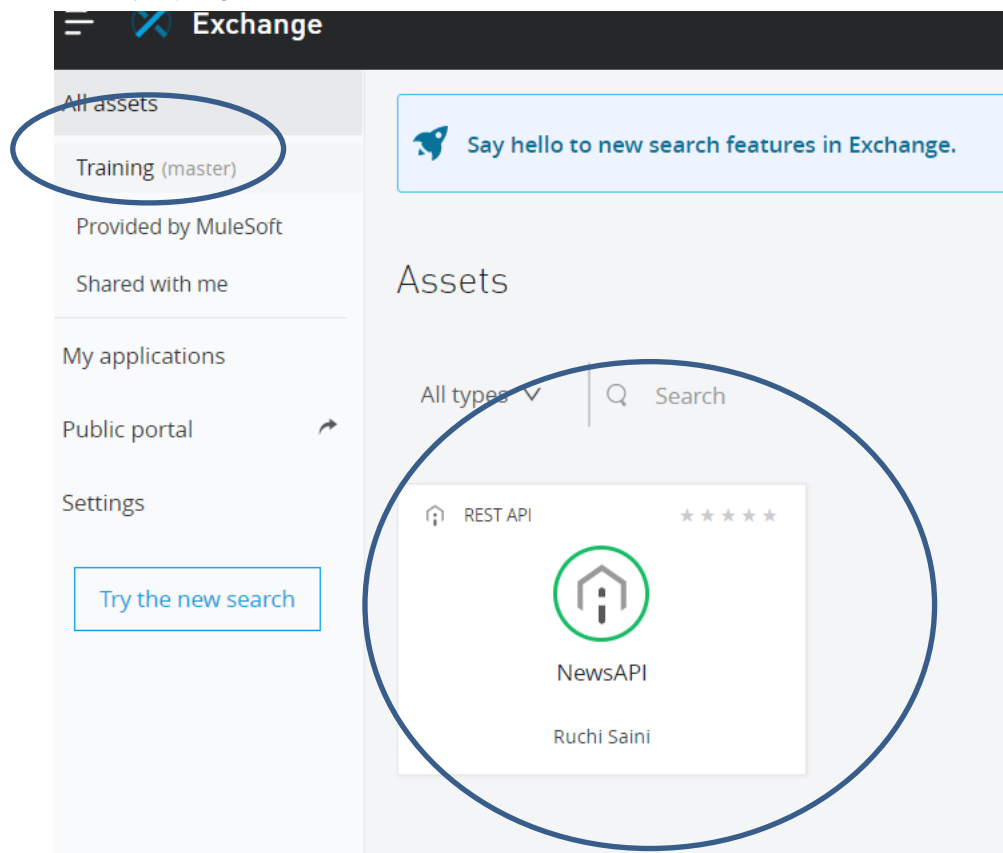
Done

Click on Done

3. Click on three bars on Top left side of your anypoint platform window and select **Exchange**. This action will take you to Exchange page.



4. In the Exchange Main page, you will find your API under your organization (Training is the name of my organization)



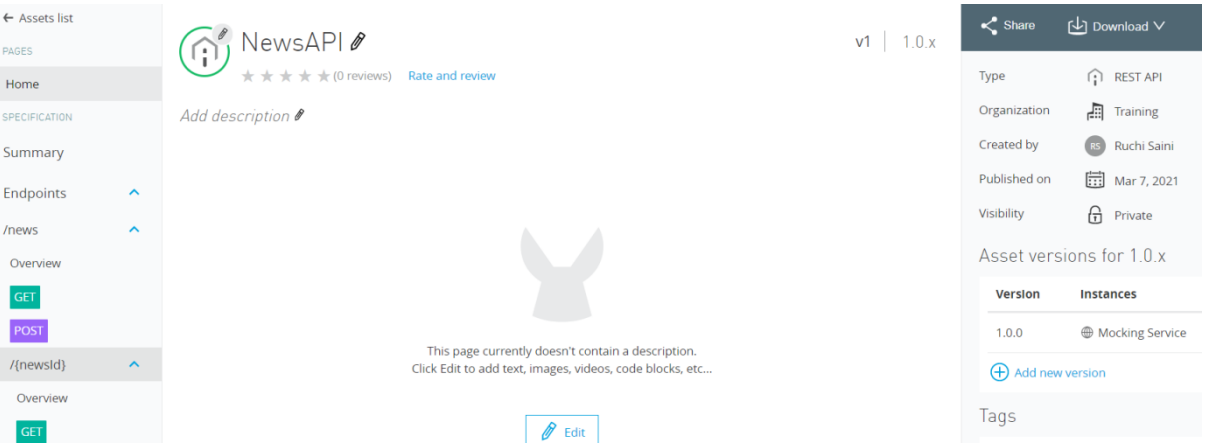
5. Click on NewsAPI and go inside

You will find the resources and methods on left hand side

The version details are at top of page and asset version is at right side of page

You can click on any method and test it with Mocking service and you will get response based on the examples defined in the Example Fragments of our NewsAPI RAML specs

6.



Version	Instances
1.0.0	Mocking Service

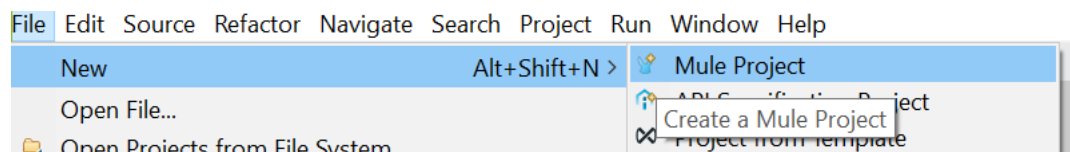
Tags

**Congratulations, you have completed step 2.**

### Step 3 – Generate Flows from RAML Specification

1. Download Anypoint Studio (download link as on September'2021)  
<https://www.mulesoft.com/lp/dl/studio>
2. Open Anypoint Studio and point it to your workspace or specify the name of new workspace (the new workspace will be created when new name is specified)

3. Create a new Mule project



4. The above action will open following window–

New Mule Project

You are screen sharing Stop Share

### Project Settings

Create a Mule project in the workspace or in an external location.

Project Name:

### Runtime

Mule Server 4.3.0 EE

[Install Runtimes](#)

### API Implementation

Add an API implementation to your project to automatically set up an APIkit router and create placeholder flows for each resource method

Import a published API Import RAML from local file **Download RAML from Design Center**

Location:

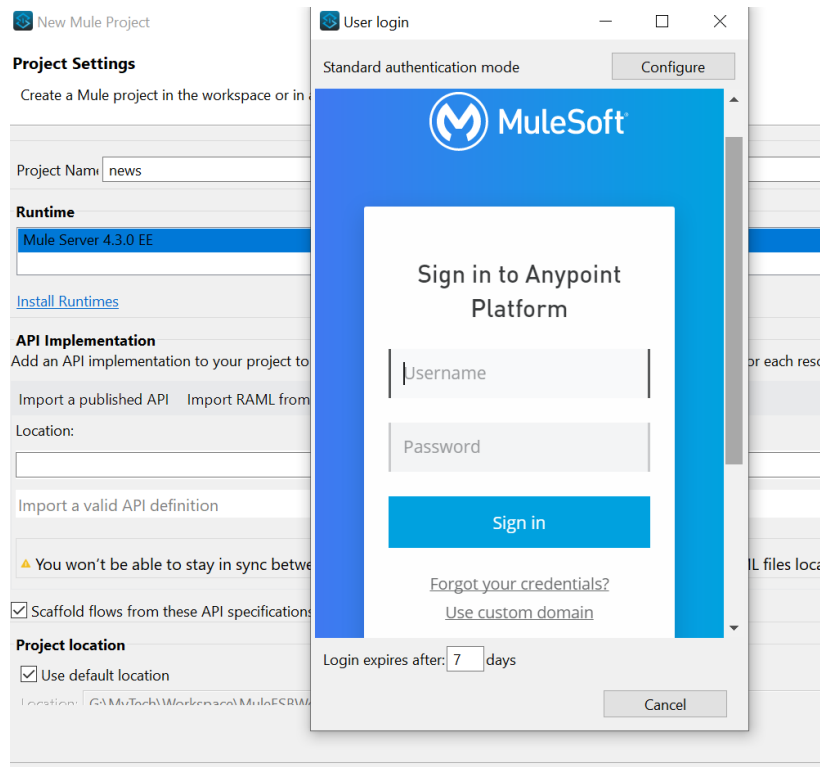
Import a valid API definition

⚠ You won't be able to stay in sync between Studio and Design Center. You can only manage your RAML files locally [Learn how to stay in sync](#)

☒ Scaffold flows from these API specifications

### Project location

- Specify the name of the project as News
- Select the tab "Download RAML from Design Center"
- Click on three dots under location
- This will open following window (first time) :-



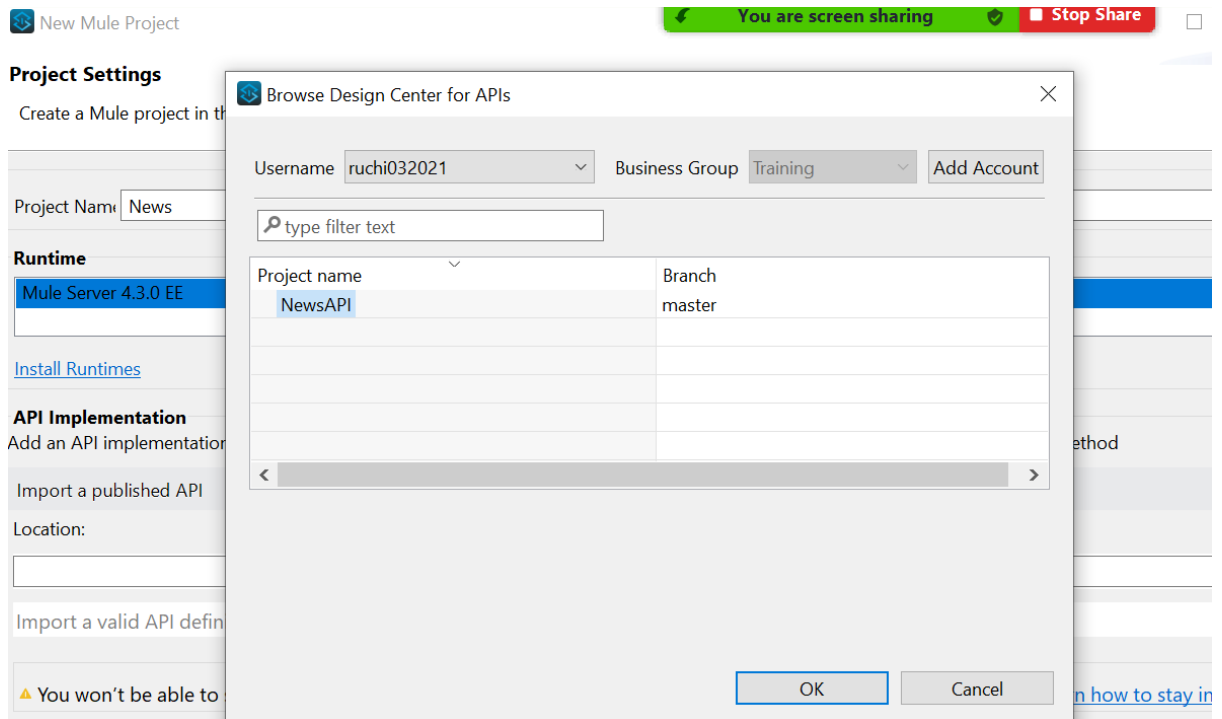
- e. Login with your Anypoint platform username and password

After logging in, you can view all your API Projects . Select the name of NewsAPI and Click on  
Ok

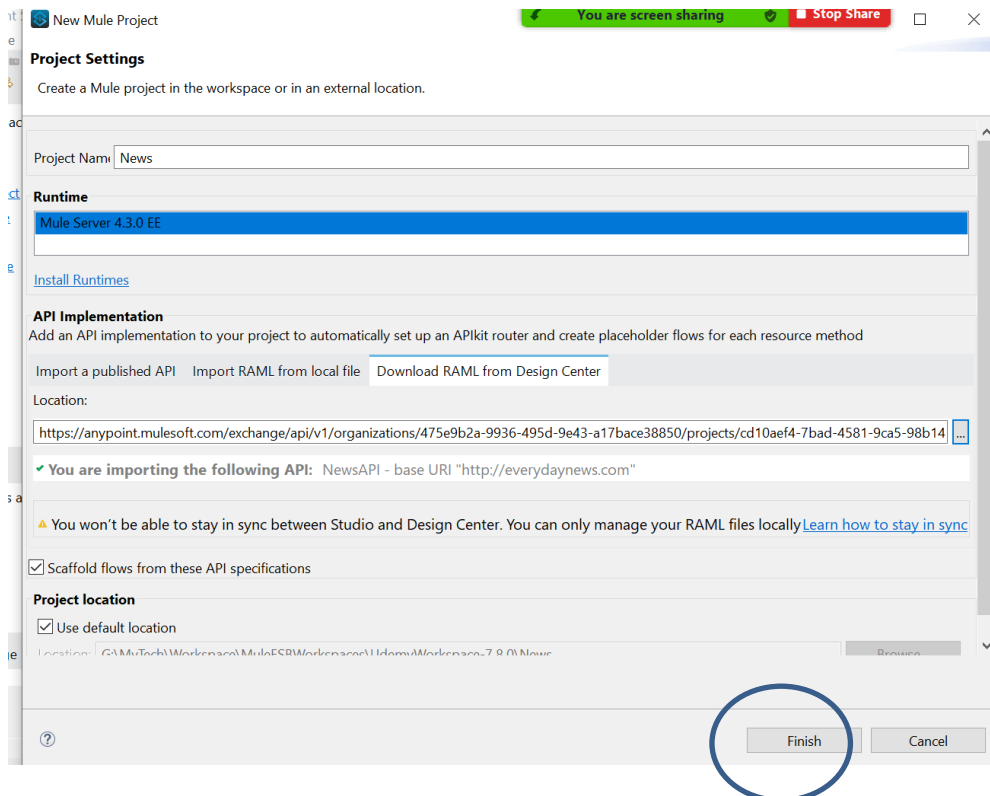
f.



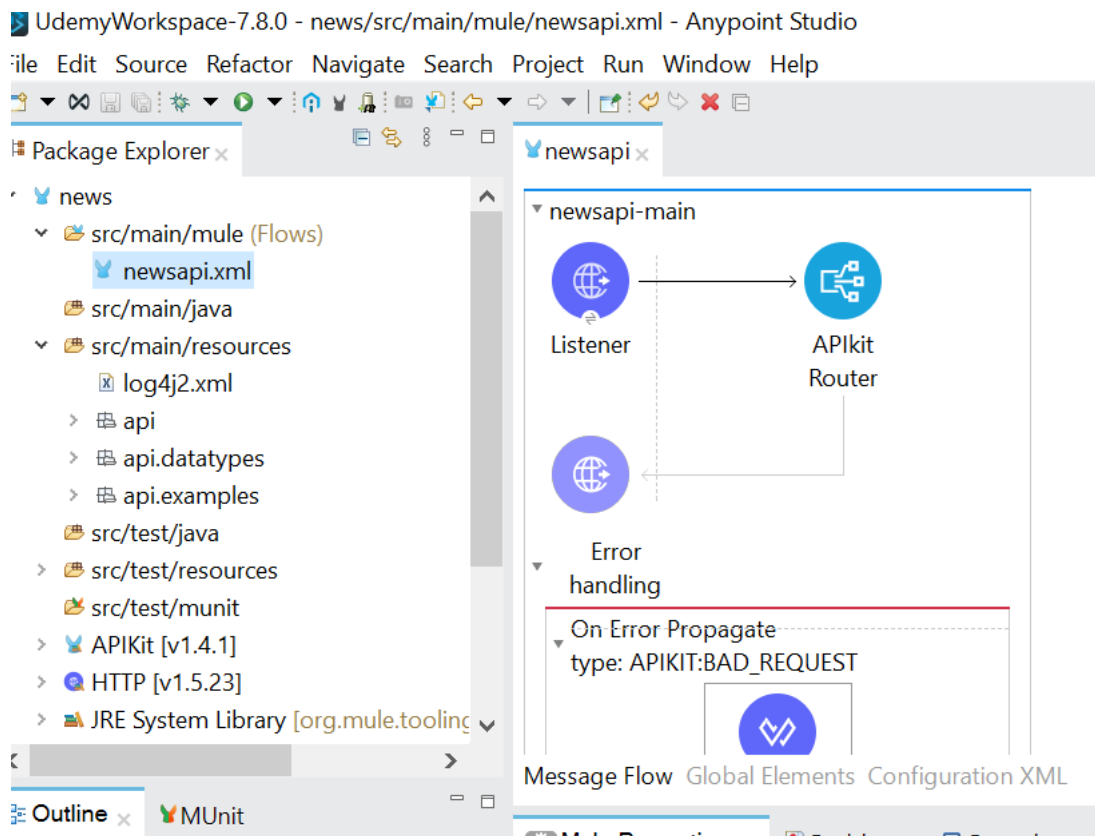
# Trainer : Ruchi Saini



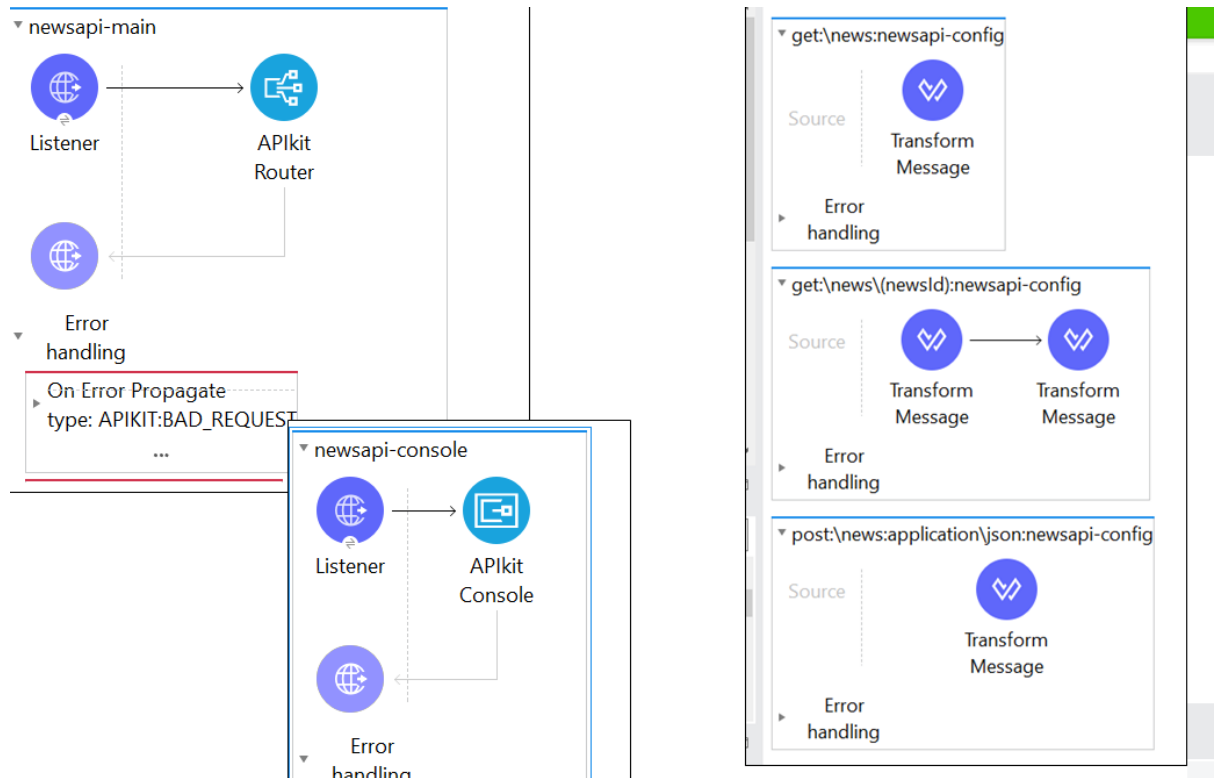
- g. The main window will have the location filled now (wait for few seconds for Finish button to enable) and then click Finish



5. This will create a new project
- a. In your XML file under src/main/mule, you will find that flows are generated :-



- b. You will find your base RAML file under `src/main/resources` in `api` folder . You will find your datatype fragments under `api.datatypes` and example fragments under `api.examples`
6. You will find the following flows in `newsapi.xml` –



7. In `get:\news:newsapi-config` flow, we have to set the example values as it is sometimes not added by default. Set it in transform message using the snippets.txt (attached in resources section of lecture). Open that text file, copy the response payload and paste it in the transform message

It should now look like following:-

The screenshot shows the **Transform Message** editor in APIKit. The **Output Payload** tab is selected, displaying the following JSON response:

```
1= %dw 2.0
2  output application/json
3  ---
4  [
5    {
6      newsId: "n2",
7      newsHeadline: "Narendra Modi elected as Prime Minister of India",
8      newsDetails: "Narendra Modi elected as Prime Minister of India",
9      reporterName: "Raj Mehra",
10     newsType: "Politics",
11     newsAgency: {
12       agencyName: "Indian Agency",
13       country: "India"
14     },
15   },
16   {
17     newsId: "n1",
18     newsHeadline: "Corona Virus Spreading",
19     newsDetails: "Corona Virus Spreading",
20     reporterName: "Ruchi Saini",
21     newsType: "General",
22     newsAgency: {
23       agencyName: "USA Agency",
24       country: "USA"
25     },
26   }
27 ]
```

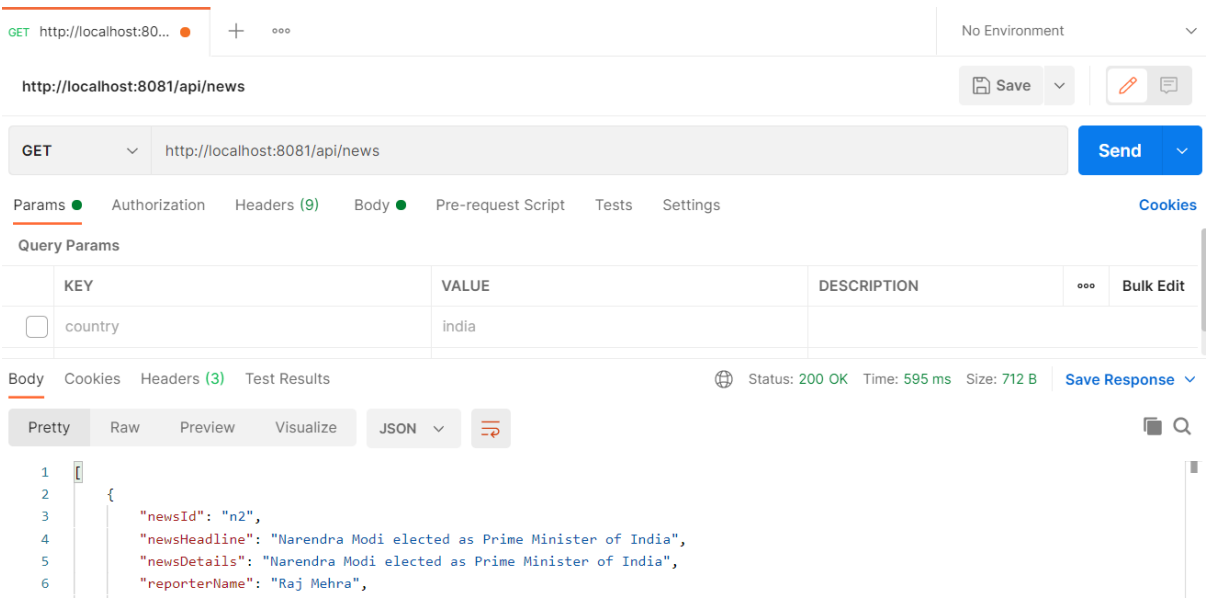
8. Check that `post:\news:application\json:newsapi-config` flow has transform message with values of example fragment as specified in API design. If not available by default , please set it.
9. Check that `get:\news\(\newsId):newsapi-config` flow has transform message with values of example fragment as specified in API design. If not available by default , please set it.
10. Check the main flow, open HTTP listener and notice its configuration. It is listening on port 8081 and path is `/api/*`
11. Run your application in anypoint studio

### Step 4 – Test using POSTMAN

1. Download postman
  - a. Download postman app or use app of your choice
  - b. Download Link - <https://www.postman.com/downloads/>
  - c. Documentation Link - <https://learning.postman.com/docs/getting-started/introduction/>
2. Please make sure that your application is running in Anypoint Studio
3. Open Postman
  - a. In the Location bar , specify <http://localhost:8081/api/news>
  - b. Select GET method and press SEND button and you will get the response back

# Trainer : Ruchi Saini

4.



The screenshot shows a REST client interface with the following details:

- Request:** GET `http://localhost:8081/api/news` with a query parameter `country=india`.
- Response:** Status: 200 OK, Time: 595 ms, Size: 712 B. The response body is a JSON object:

```
{
  "newsId": "n2",
  "newsHeadline": "Narendra Modi elected as Prime Minister of India",
  "newsDetails": "Narendra Modi elected as Prime Minister of India",
  "reporterName": "Raj Mehra",
}
```

*Congratulations, you have completed step 3.*

Congratulations!! You have completed this exercise.