

# Lab3 - Publish your API

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## API Connect

API Connect is the API Management framework built by IBM. API Connect integrates with Loopback and is available as an API Connect service on IBM Cloud.

See: <https://developer.ibm.com/apiconnect/getting-started>

## Lab3

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### 1. Create API Connect service instance on IBM Cloud

- Login to <https://cloud.ibm.com>,
- Go to the Catalog
- Search the catalog... for **API Connect** in the **Integration** category,
- Click the **API Connect** service panel,
- Optionally, edit the service name, location, and space,
- Click the **Create** button,
- If the page does not load correctly in Google Chrome, try Firefox,
- By default, API Connect creates a Sandbox Catalog,
- Open the Sandbox Catalog,
- Currently, there are no products published in the Sandbox,

### 2. From the local API Designer publish the product as **stage only** to the IBM Cloud

- Start the API Designer on your localhost to load the products created in Lab1 and Lab2,

```
$ apic edit
```

- Go to the APIs tab,
- Select the **apic-api 1.2.0** API,
- Go to the **Info** section, and change the **Version** to **1.2.1**,
- Go to the **Schemes** section,
- The API Connect service on IBM Cloud requires and allows only the **https** Scheme, so disable the **http** protocol and enable only the **https** protocol,

- Click the **Validate** icon,
- Click the **Save** icon,
- From the dropdown in the top right, select the **Add to existing products**,
- Select the **1.2.0** option,
- Click the **Add** button,
- Go to the Products tab,
- Open the **apic-api 1.2.0** product,
- In the Plan designer, go to the **Default Plan** section, and in the **1 API included** section, unfold the **apic-api 1.2.0** to list all the API methods,
- Uncheck the writeable API methods:
  - Post.create
  - Post.updateAll
  - Post.updateByld
  - Popst.deleteByld
- Click the **Save** button,
- Click the Publish button,
- Select **Add and Manage Targets**,
- Select the **Add IBM Cloud target** option,
- Configure the settings corresponding to those in your API Connect service instance:
  - Select the Region,
  - Select the Organization and Space,
  - API Connect loads the catalogs that match the configured settings, if correct you should see the catalog named **Sandbox**,
  - Select **Sandbox** catalog and click **Next**,
  - Leave the application name empty for now, and select **None**,
  - Click the **Save** button,
  - You have now added a target for the product,
  - Again click the Publish button,
  - Select the **Sandbox (sb)** target,
  - Check the **Stage Only** option,

- Click the **Publish** button,
- Go back to <https://cloud.ibm.com>,
- In the **Resource summary** select the **View resources** link,
- Under **Cloud Foundry Services**, select the API Connect instance you created,
- Select the **Sandbox** catalog,
- Under the **Products** tab you should see the product that you published in the previous step, the **State** should display **Staged**,

### 3. Add a Developer Portal,

- In the Sandbox catalog, click the Settings,
- Go to the **Portal** in the left column,
- In the **Portal Configuration**, under **Select portal** dropdown, select the **IBM Developer Portal**,
- Click the **SSave** icon,
- You will see a popup window 'Creating the developer portal... Creating the developer portal for catalog 'Sandbox' may take a few minutes. You will receive an email when the portal is available.'
- Click **OK**,

### 4. Publish the staged product,

- Go back to the **Products** tab,
- Select the options dropdown to the right of the **apic-api 1.2.0** staged product,
- Click **Publish**
- Click **Publish**
- The state of the product should change to **Published**

### 5. Sign up, Add an Application and Subscribe to the APIs

- Keep at eye at your email inbox and wait for the email with subject **Your new site <https://sb-<your-name>.developer.us.apiconnect.ibmcloud.com> has been created.** email,
- Open the email and click on the **change the password for the admin user** link, click the **Log in** link, change your password, and click **Save**,
- Logout of the **admin** account,
- Click the **Create an account** link,
- Sign up with your personal information,
- Click the **Create an account** button,
- You should receive a **Thank you for signing up for our APIs** email with an activation link,
- After successful activation, login with your confirmed developer account,

- Click the **Apps** tab, and click the **Create new App** button,
- For **Title** add **APIC App**, and click **Submit**,
  - Save the Client Secret and Client ID,
  - E.g. Client ID: tl2vE6mL7qX1IX1qV7uU0kX1bA5mA2iQ5bN6wP4pX6iL6gA0qL
  - Client Secret: 2bfa445e-5d83-4c22-9a9d-e851f87a080f
- Go to the **API Products** tab,
- Select the **apic-api (1.2.0)(1 API included)** API Product,
- Under Plans, select the **apic-api 1.2.1** plan and click the **Subscribe** button,
- In the **Subscribe** window, select the **APIC App** option,
- Click the **Subscribe** button,
- At the top of the page, you should see a **Successfully subscribed to this plan** notification,
- Go to **Apps**, **APIC App** application, and in the **Subscriptions** window you should see your subscription listed now,
- Go to the **Getting Started** tab,
- Click the **Explore our APIs** button,
- Or go directly to the **API Products** page,
- Select the **apic-api (1.2.0)(1 API included)** API Product,
- In the left menu, under APIs, select the **apic-api** option,
- The Explorer window opens,
- Remember that we did not select an Application when we staged and published the API, so currently you will get a 500 error when you test out the API endpoints.

```
curl GET 'https://api.us-  
south.apiconnect.appdomain.cloud/remkohdevusibmcom-  
dev/sb/api/Posts'  
curl: (6) Could not resolve host: GET  
{ "statusCode": "500", "httpMessage": "Internal Server Error",  
  "moreInformation": "Backside URL invalid" }
```