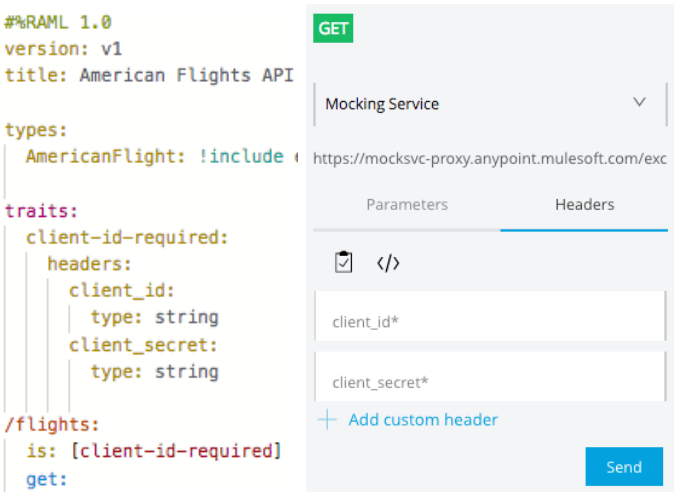
# Walkthrough 5-5: Add client ID enforcement to an API specification

In this walkthrough, you add client ID enforcement to the API specification. You will:

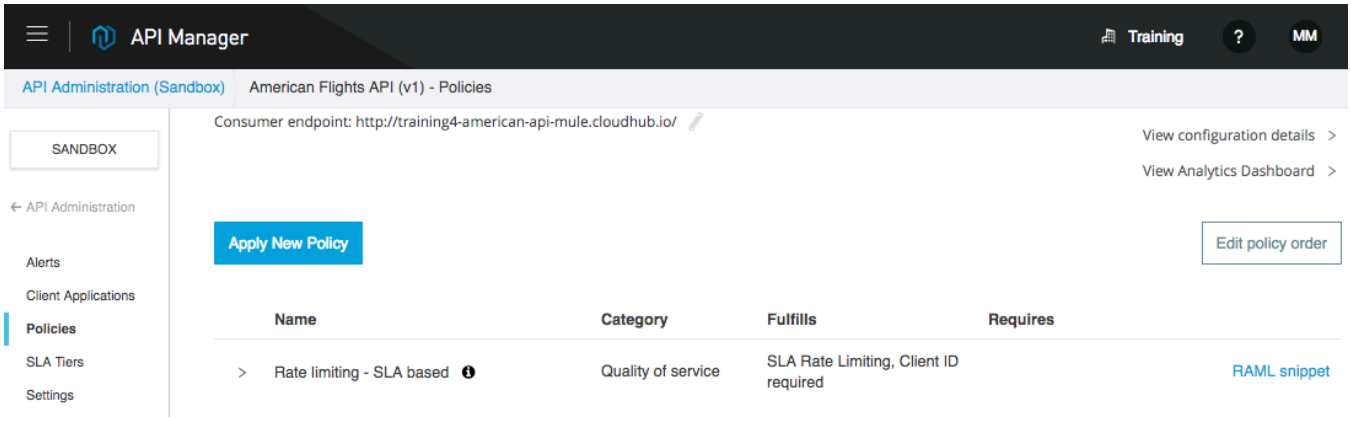
- Modify an API specification to require client id and client secret headers with requests.
- Update a managed API to use a new version of an API specification.
- Call a governed API with client credentials from API portals.

  *Note: If you do not complete this exercise for Fundamentals, the REST connector that is created for the API and that you use later in the course will not have client_id authentication.*

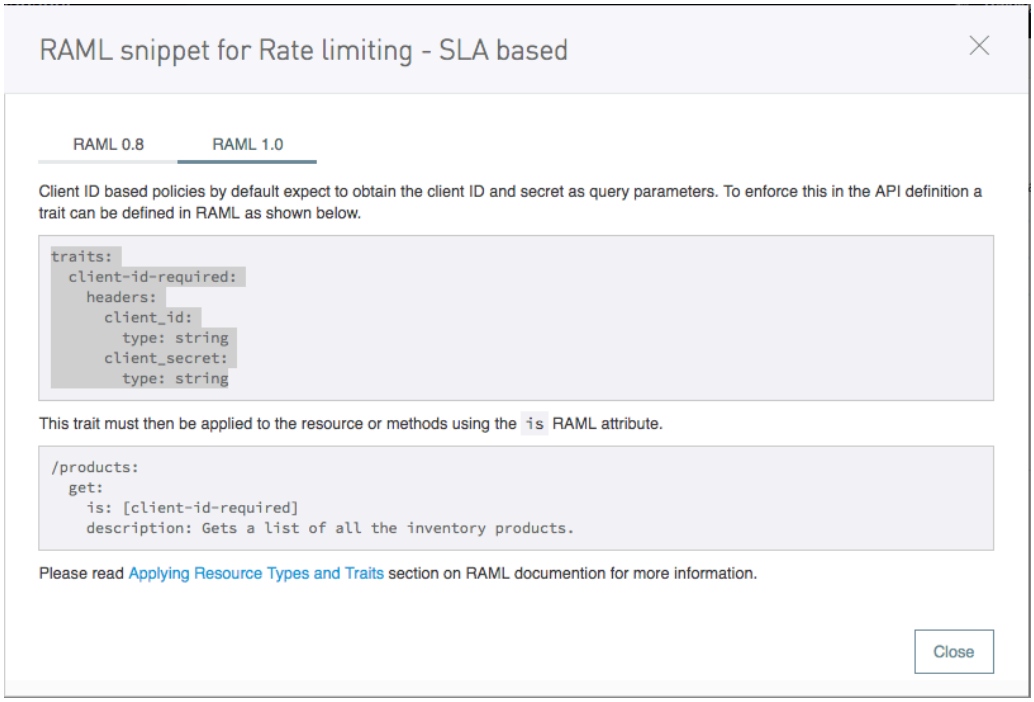



## Copy the traits required to add authentication to the API specification

1. Return to the browser tab with the Settings page for American Flights API (v1) in API Manager.
2. In the left-side navigation, select Policies.
3. Click the RAML snippet link for the rate limiting – SLA based policy.



4. In the RAML snippet for Rate limiting – SLA based dialog box, select RAML 1.0.
5. Copy the value for the traits.




6. Click Close.

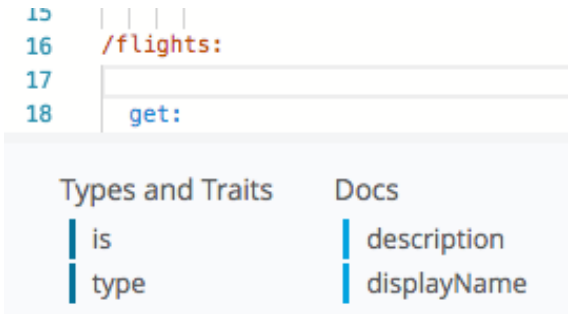
## Add authentication headers to the API specification

7. Return to the browser tab with your API in Design Center.
8. Go to a new line after the types declaration and paste the traits code you copied.

```
#%RAML 1.0
version: v1
title: American Flights API

types:
  AmericanFlight: !include exchange_modules/

traits:
  client-id-required:
    headers:
      client_id:
        type: string
      client_secret:
        type: string

/flights:
```

9. Go to a new line after the /flights resource declaration and indent.

10. In the shelf, select is.




11. Add empty array brackets.

```
16  /flights:
17    is: []
18    get:
```

12. Make sure the cursor is inside the brackets and in the shelf, select client-id-required.

```
16  /flights:
17    is: [client-id-required]
18    get:
```

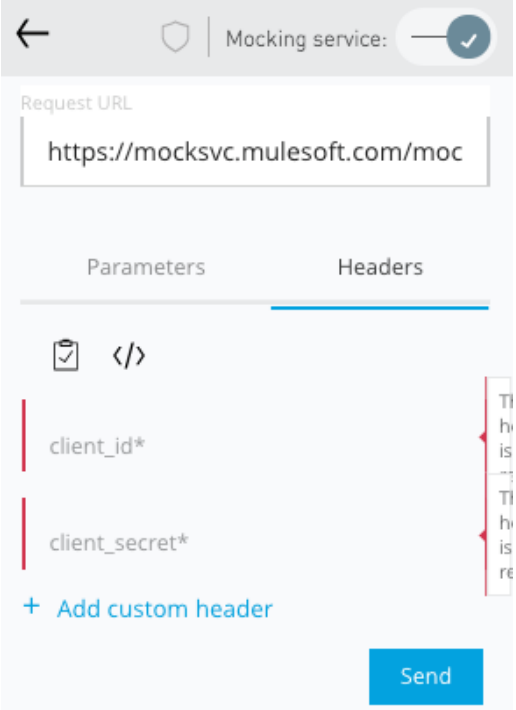
13. Repeat this process so the trait is applied to all methods of the {ID} resource as well.

```
44  /{ID}:
45    is: [client-id-required]
46    get:
```

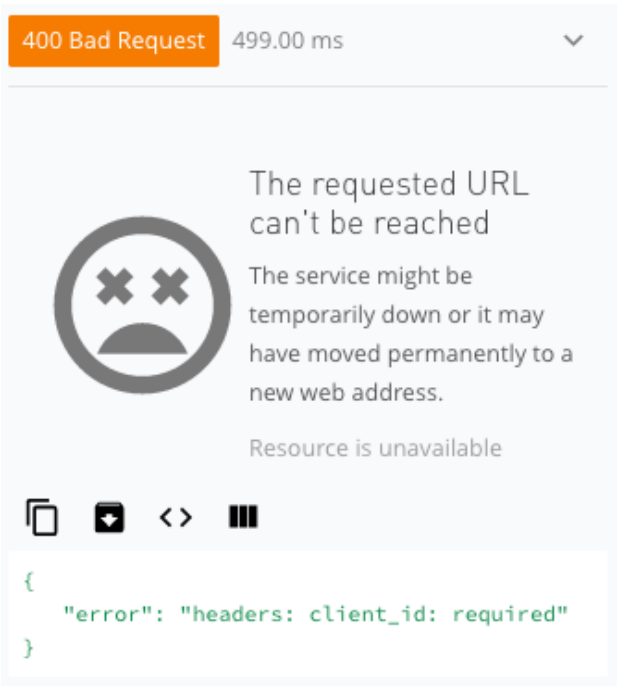
## Test the API in the API console in Design Center

14. In the API console, turn on the mocking service.
15. Select one of the resources and click Try it.

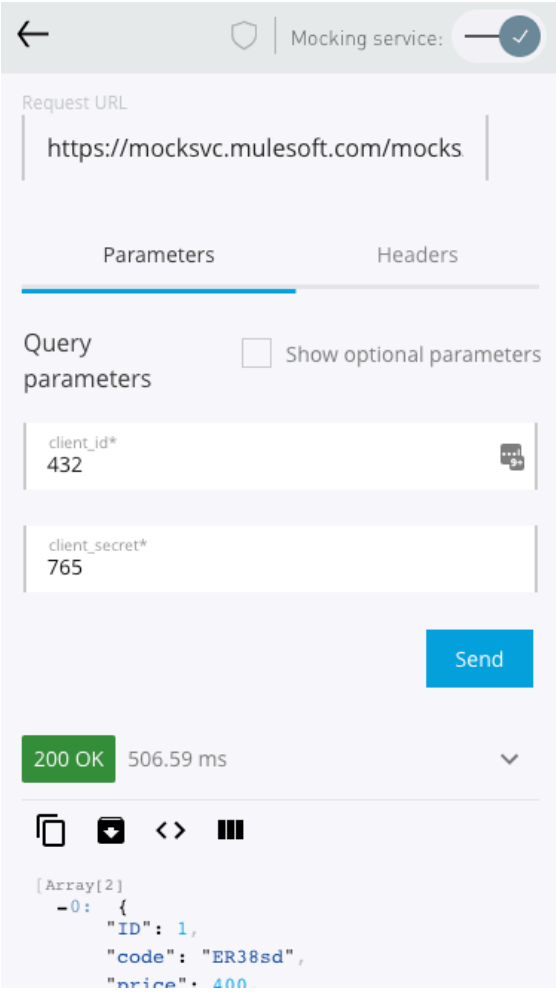
16. Select the Headers tab; you should now see fields to enter client_id and client_secret.




17. Click Send; you should get a 400 Bad Request response with a message that a client_id header is required.

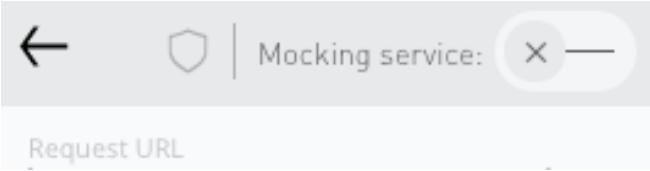


18. Enter *any* values for the client_id and client_secret and click Send; you should get a 200 response with the example results.



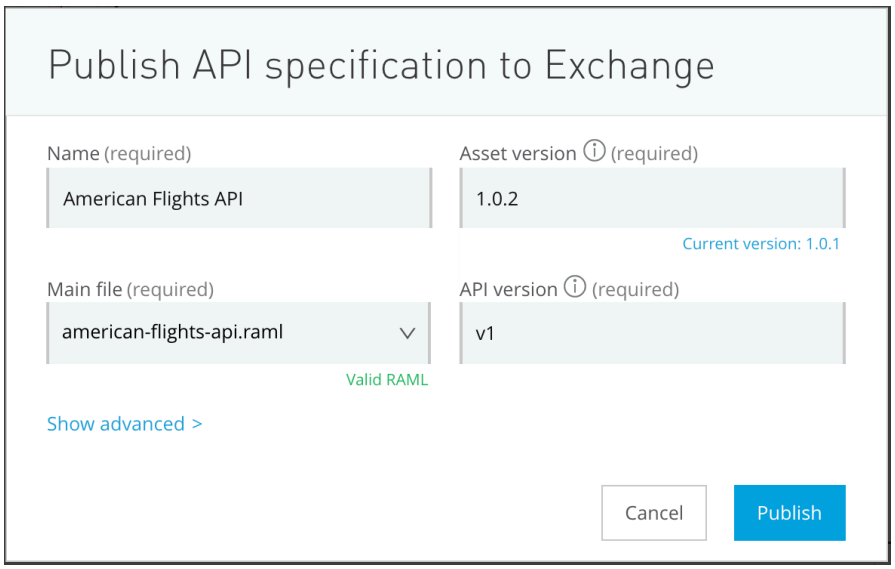

## Publish the new version of the API to Exchange

19. Turn off the mocking service.




20. Click the Publish to Exchange button.

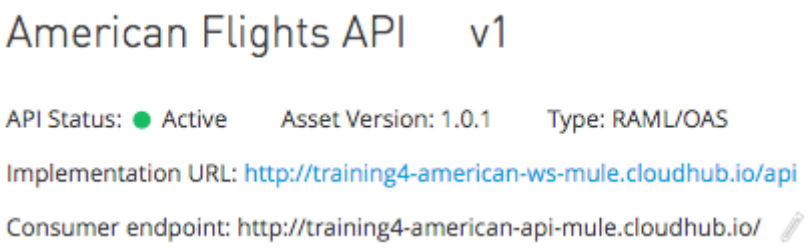
21. In the Publish API specification to Exchange dialog box, note the asset version and click Publish.



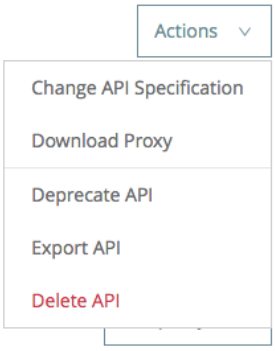

22. After the API is published, click Done in the Publish API specification to Exchange dialog box.

## Update the managed API instance to use the new version of the API specification

23. Return to browser tab with American Flights API (v1) in API Manager.
24. Locate the asset version displayed at the top of the page; you should see 1.0.1.

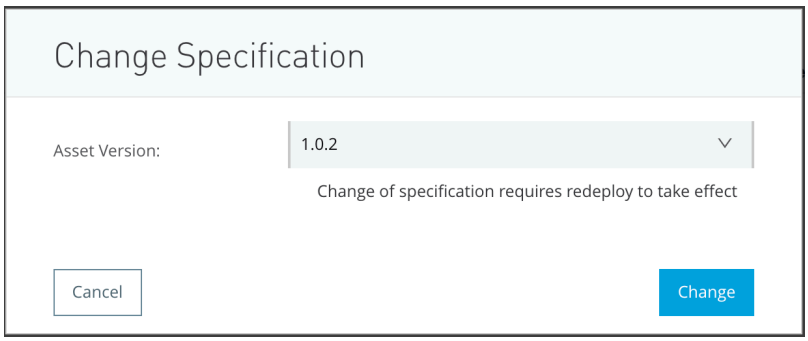



25. Click the Actions button in the upper-right corner and select Change API Specification.



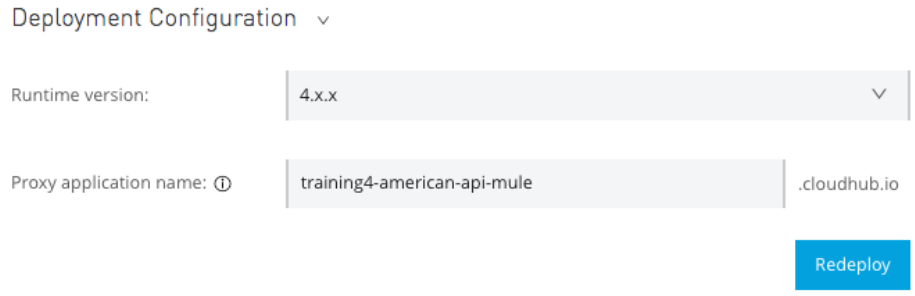

26. In the Change Specification dialog box, select the latest asset version, 1.0.2.

27. Click Change.

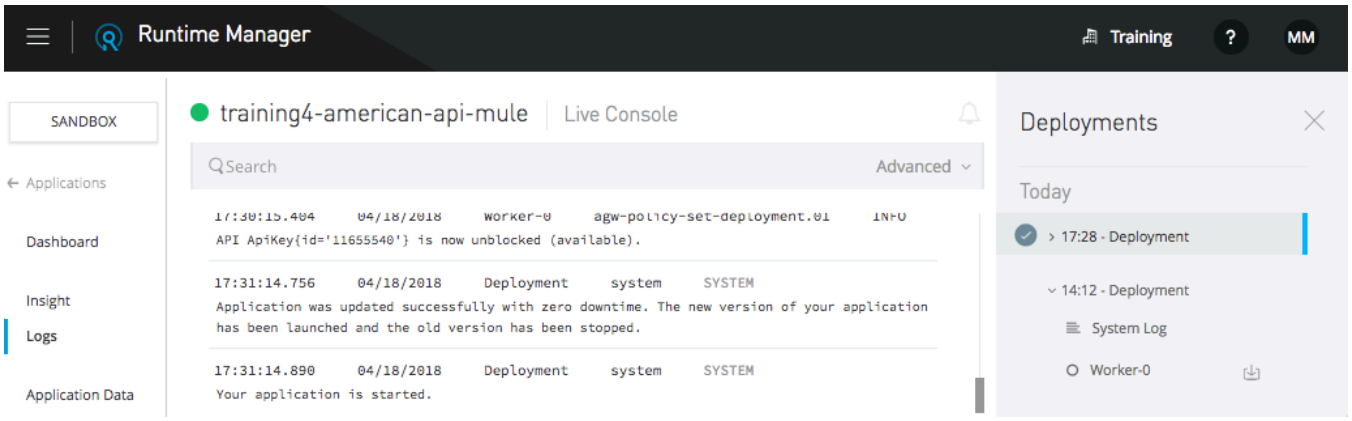



## Redeploy a new proxy

28. In the left-side navigation, select Settings.
29. Scroll down to the Deployment Configuration settings; the Redeploy button should be disabled.
30. For the runtime version, select 4.x.x again; the Redeploy button should now be enabled.



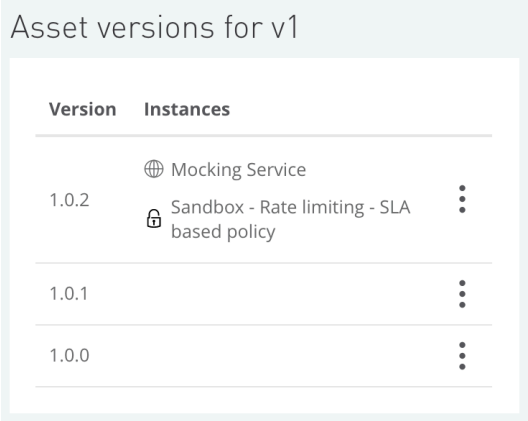

31. Click Redeploy.
32. In the Deploying to CloudHub dialog box, click the Click here link to see the logs.
33. Watch the logs and wait until the proxy application is redeployed.




34. Close the browser tab.
35. Return to the browser tab with API Manager and click Close in the Deploying to CloudHub dialog box.

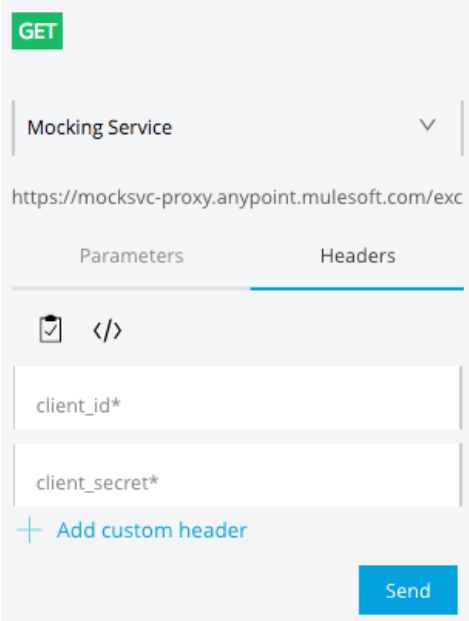
## Test the rate limiting – SLA based policy in the API console in Exchange

36. Return to the browser tab with Exchange.
37. Return to the home page for the API (and refresh if necessary); you should see the new asset version listed.




38. Click the GET method for the flights resource and select the Headers tab; you should see required text fields for client_id and client_secret and no longer need to add the headers manually for each request.

    *Note: You will test and use the authentication with the REST connector later in the Fundamentals course.*




39. Close all Anypoint Platform browser windows and tabs.