

Hands-on Lab:

Promote Aliases with Stage-specific Values

Objectives

In this hands-on lab, you will promote an API which is using an endpoint alias in its routing policy. You will configure different alias values for **API Gateway Dev Stage** and **API Gateway Prod Stage**.

Steps

1. Open Windows Services UI to double check that the following services, needed for API Gateway and the native services, are up and running. If service is not running, start the service.
 - a) **Software AG Dev Stage Integration Server 10.5**
 - b) **Software AG Prod Stage Integration Server 10.5**
 - c) **Software AG Internal Integration Server 10.5**
2. Open the **Windows Explorer** and navigate to:
C:\Training\E456C04-75E\setup
3. Right-click file **Restore_Initial_Backup_PROD.bat** and select **Run as administrator**. This will restore the initial (empty) backup of the **API Gateway Prod Stage** database created in hands-on lab **Prepare Bookstore API on API Gateway**.
4. Logon to **API Gateway Dev** as user **Administrator/manage**.
5. In the User Menu, navigate to **Aliases**.
6. Click on **Create alias**. Provide the following properties:
 - a) **Name:** BookstoreServer
 - b) **Type:** Endpoint alias
 - c) **Description:** Fictitious server for the Bookstore API on API Gateway DEV

Create alias

Create an alias by providing the basic information, and defining the alias type

Alias details

Basic information

Technical information

Name*

BookstoreServer

Type

Endpoint alias

Description

Fictitious server for the Bookstore API on API Gateway DEV

Continue to technical information

Click **Continue to technical information**.

7. Provide the following properties:

- a) **Optimization technique:** NONE
- b) **Pass WS-Security Headers:** - leave unchecked -
- c) **Endpoint URI:** http://dev.fictitiousbookstore.com
- d) **Connection timeout:** 100
- e) **Read timeout:** 100
- f) **Keystore alias:** - leave blank -
- g) **Key alias:** - leave blank -
- h) **Stage:** - leave blank -

The screenshot shows the 'Create alias' form with the 'Technical information' tab selected. The form fields are as follows:

- Type:** Endpoint alias
- Optimization technique:** NONE
- Pass WS-Security Headers:** ☐
- Endpoint URI*:** http://dev.fictitiousbookstore.com
- Connection timeout:** 100
- Read timeout:** 100
- Keystore alias:** (empty)
- Key alias:** (empty)
- Stage:** (empty)

The 'Save' button is highlighted with a red box.

Click **Save**. This alias will be used at run-time on the **API Gateway Dev**.

8. Click on **Create alias**. Provide the following properties:

- a) **Name:** BookstoreServer (yes, the same name!)
- b) **Type:** Endpoint alias
- c) **Description:** Fictitious server for the Bookstore API on API Gateway PROD

The screenshot shows the 'Create alias' form with the 'Basic information' tab selected. The form fields are as follows:

- Name*:** BookstoreServer
- Type:** Endpoint alias
- Description:** Fictitious server for the Bookstore API on API Gateway PROD

The 'Continue to technical information' button is highlighted with a red box.

Click **Continue to technical information**.

9. Provide the following properties:

- a) **Optimization technique:** NONE
- b) **Pass WS-Security Headers:** Leave unchecked
- c) **Endpoint URI:** http://prod.fictitiousbookstore.com
- d) **Connection timeout:** 50
- e) **Read timeout:** 50
- f) **Keystore alias:** Leave blank
- g) **Key alias:** Leave blank
- h) **Stage:** Production

Create alias
Create an alias by providing the basic information, and defining the alias type

Alias details

Basic information

Technical information

Type: Endpoint alias

Optimization technique: NONE

Endpoint URI*: http://prod.fictitiousbookstore.com

Keystore alias

Stage: Production

Pass WS-Security Headers

Connection timeout: 50

Read timeout: 50

Cancel Save

Click **Save**. This alias will be used at run-time on the **API Gateway Prod**.

Alias management
Manage all the aliases here

Create alias

Name	Description	Type	Stage
BookstoreServer	Fictitious server for the Bookstore API on API Gateway DEV	Endpoint alias	
BookstoreServer	Fictitious server for the Bookstore API on API Gateway PROD	Endpoint alias	Production

10. Navigate to **APIs**. From the list of APIs select **Bookstore** and switch to **Edit** mode.

11. Navigate to **Policies > Routing**. In the configuration of the **Straight Through Routing** policy, adjust the following property:

Endpoint URI: `${BookstoreServer}/rest/bookstore/${sys:resource_path}`

Straight Through Routing

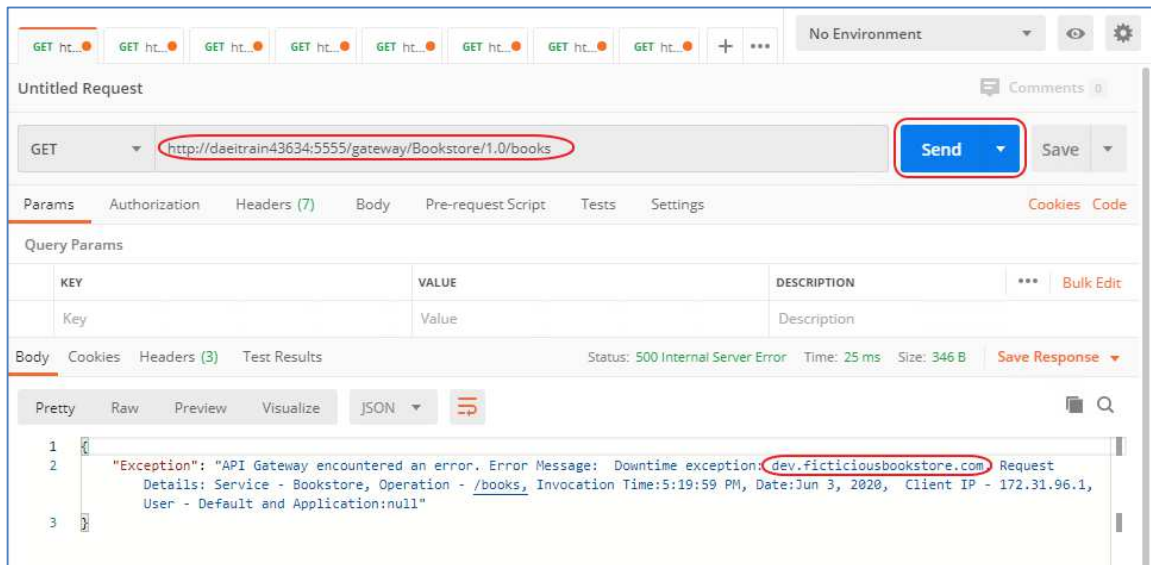
Endpoint URI *

`${BookstoreServer}/rest/bookstore/${sys:resource_path}`

Click **Save**.

12. Navigate back to **API details** and copy the gateway endpoint.

13. Open **Postman** REST client and paste the URL into the REST client and append “/books” to the URL; then click **Send**. This will invoke the Bookstore API on the API Gateway Dev Stage. As the endpoint configured in the BookstoreServer alias is invalid, the API Gateway will return an error message.



Inspect the error message and check that the **API Gateway Dev** tried to forward the request to **dev.fictitiousbookstore.com**.

14. Back in **API Gateway Dev**, in the User Menu, navigate to **Promotion Management**.
15. In the Promotions tab, click **Promote**.
16. Check the checkbox for the **APIs** search option, and then select the **Bookstore** API for promotion. Click **Next**.
17. Click **Next**. Select the **Production** stage as target stage for the promotion. Click **Next**.
18. Provide the following properties:
- a) **Name:** Bookstore promotion with alias
 - b) **Description:** Promotion of Bookstore API and the production version of the BookstoreServer endpoint alias

The screenshot shows the 'Promote' form in the API Gateway Dev console. The form has a title 'Promote' and a subtitle 'Promote assets to different stages. ?'. There are two main input fields: 'Name*' and 'Description'. The 'Name*' field contains the text 'Bookstore promotion with alias' and is circled in red. The 'Description' field contains the text 'Promotion of Bookstore API and the production version of the BookstoreServer endpoint alias' and is also circled in red. Below these fields are three checkboxes: 'Overwrites assets except alias that already exist on the selected target stages.' (checked), 'Overwrites aliases that already exist on the selected target stages.' (unchecked), and 'Fix missing versions' (unchecked).

Click **Promote**.

Promotion management
Manage stages, promote assets, and rollback promotions here.

Stages Promotions Rollback

Stage-specific promotion status

Production

Asset type	Name	Status	Comments
Alias	BookstoreServer	✓	OK
API	Bookstore[1.0]	✓	OK
Policy	Policy For API Bookstore[1.0]	✓	OK
PolicyAction	Policy Action [Straight Through Routing] -> Policy For API Bookstore[1.0]	✓	OK
PolicyAction	Policy Action [Log Invocation] -> Policy For API Bookstore[1.0]	✓	OK
PolicyAction	Policy Action [Enable HTTP / HTTPS] -> Policy For API Bookstore[1.0]	✓	OK

19. In a new private browser window, logon to **API Gateway Prod** as user **Administrator/manage**.
20. Navigate to **Aliases** and check that the right version of the **BookstoreServer** endpoint alias was promoted to **API Gateway Prod**.

Alias management
Manage all the aliases here.

Create alias

Name	Description	Type	Stage
BookstoreServer	Fictitious server for the Bookstore API on API Gateway PROD	Endpoint alias	

BookstoreServer
View alias basic details along with the configured properties.

Alias details

Basic information

Technical information

Name BookstoreServer

Type Endpoint alias

Description Fictitious server for the Bookstore API on API Gateway PROD

Technical information

Optimization technique NONE

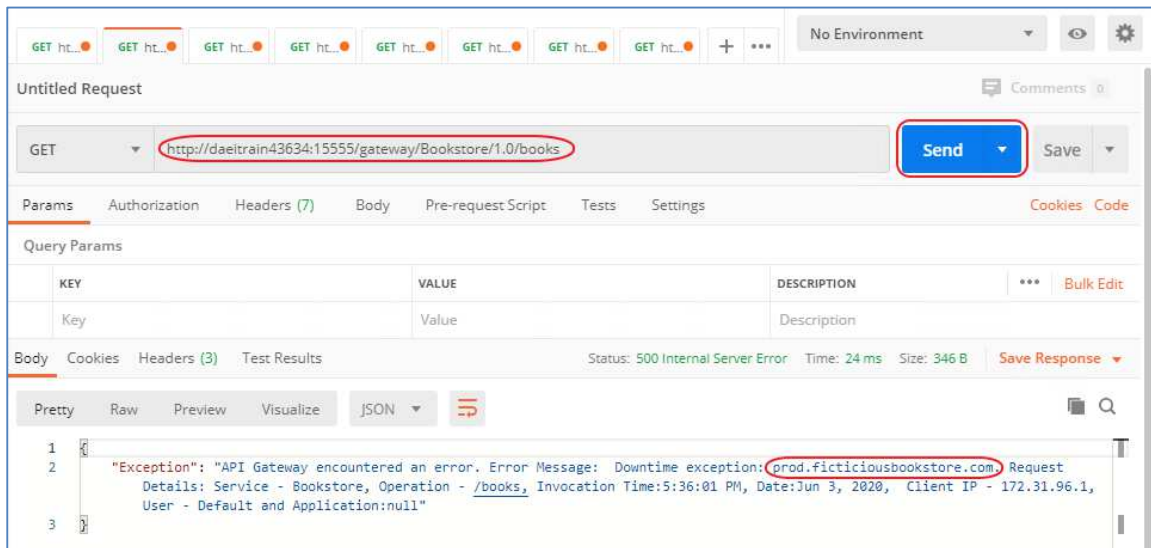
Endpoint URI http://prod.fictitiousbookstore.com

Connection timeout 50

Read timeout 50

21. Open the **Bookstore** API and copy the gateway endpoint into the Windows clipboard.

22. Open **Postman** REST client and paste the URL into the REST client and append “/books” to the URL; then click **Send**. This will invoke the Bookstore API on the **API Gateway Prod Stage**. As the endpoint configured in the BookstoreServer alias is invalid, the API Gateway will return an error message.



Inspect the error message and check that the **API Gateway Prod** tried to forward the request to **prod.fictitiousbookstore.com**.