

## Hands-On Lab: Adding a Logging Policy

### Objectives

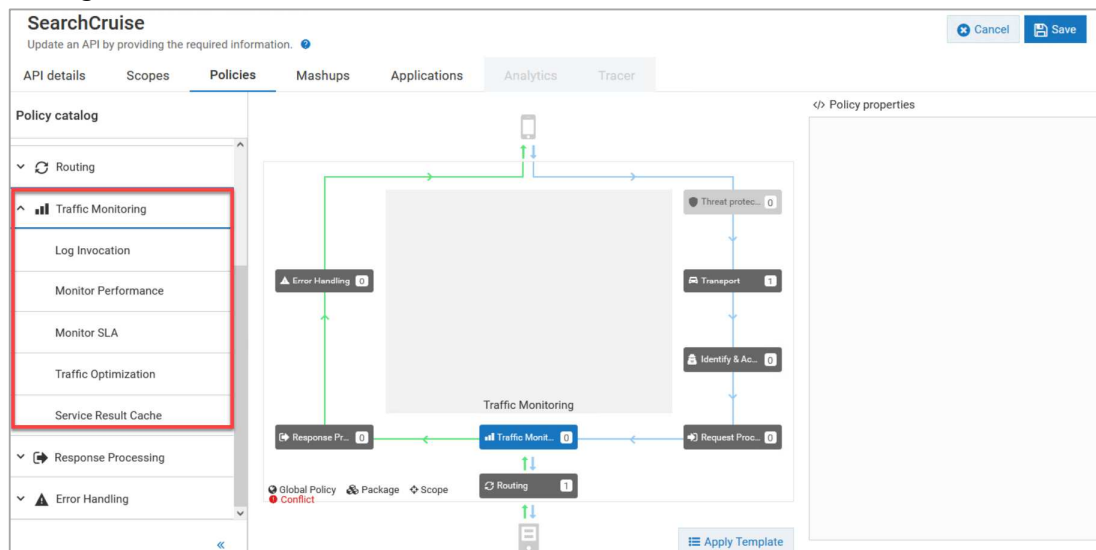
In this hands-on lab, you will learn how to provide an API runtime policy which enforces the API Gateway to log the message request body.

### Steps

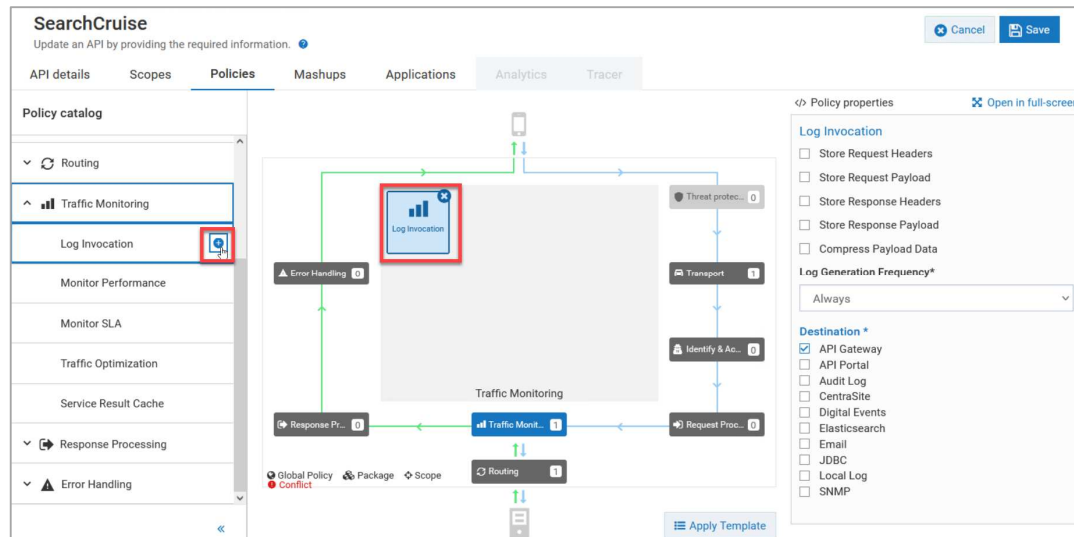
- 1) Open the **Windows Services** panel to double-check that the following services, needed for API Gateway and the native services, are up and running. If a service is not running, start the service.
  - a) **Software AG Integration Server 10.11 (default)**
  - b) **Software AG Runtime 10.11**
- 2) In a browser tab, login to the API Gateway UI as user **Sumala | manage** and configure monitoring policies for the service SearchCruise:
  - a) On the **Manage APIs** page, select the API **SearchCruise**. This will open the details view of the SearchCruise API.



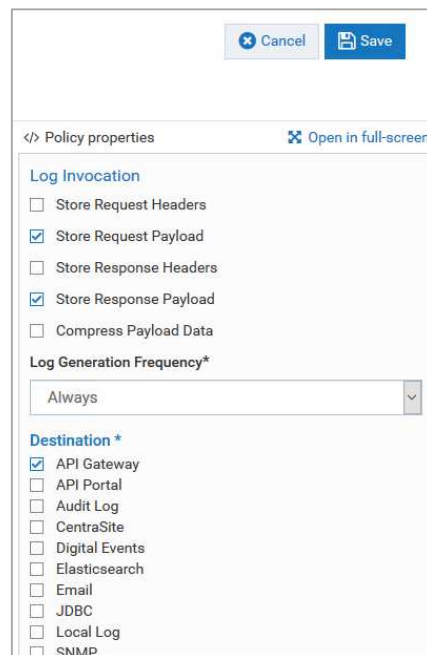
- b) Click **Edit** to open the API in Edit mode. Confirm with **Yes**.
- c) Navigate to the API's **Policies** tab. Expand **Traffic Monitoring** in the left-hand Policy catalog.



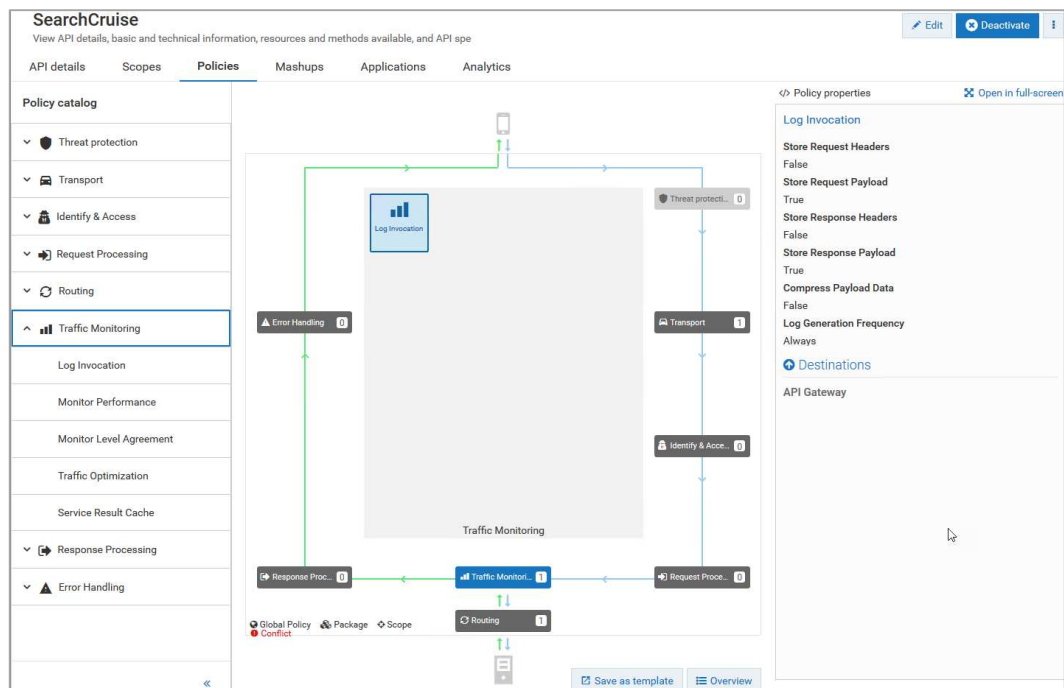
- d) In the Policy catalog section, click on the + sign next to policy **Log Invocation**. This will add a policy of this type to the policy stages diagram and open the policy properties in the panel titled **Policy properties**.



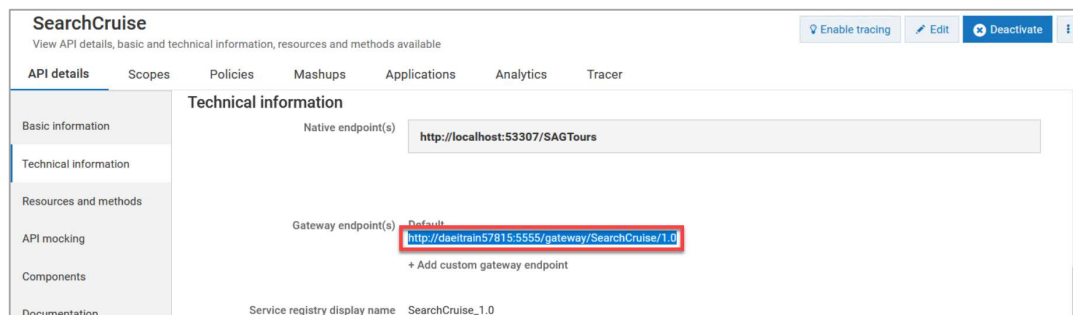
- e) Adjust the following properties:
- i) Store Request Payload: **<selected>**
  - ii) Store Response Payload: **<selected>**
  - iii) Log Generation Frequency: **Always**
  - iv) Destination: **API Gateway**



- f) Click **Save**.



- g) Open tab **API details** to copy the **Gateway endpoint** within the **Technical information** section into the clipboard.

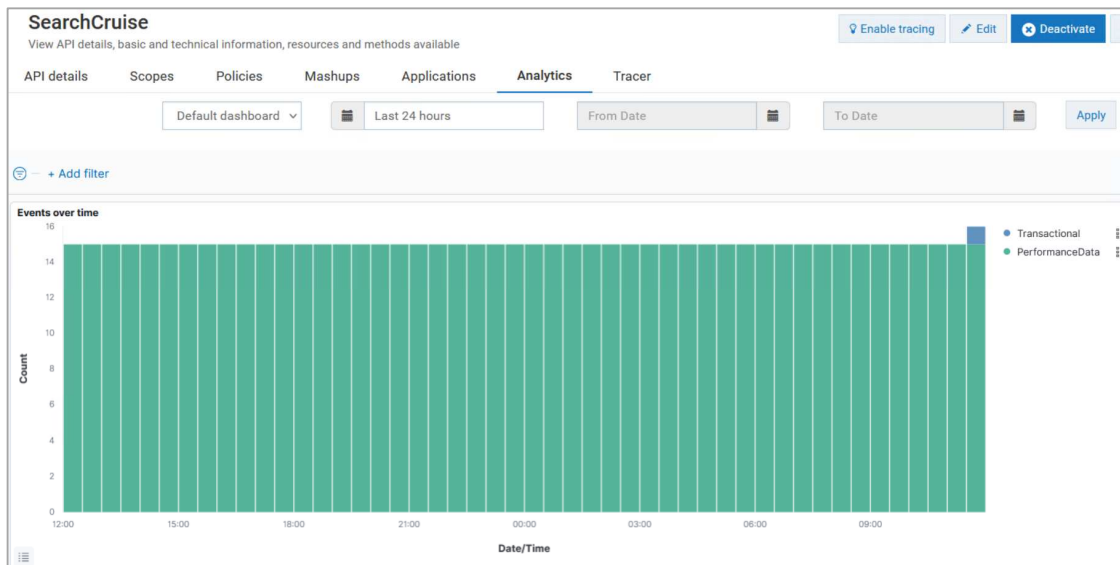


*Note:* The hostname within the URL will be depended on your environment.

- 3) Switch to **Postman** and create a request against our API like this:
- a) Method: **GET**
  - b) URL: <paste the Gateway endpoint out of the Technical information profile and append resource name **crui**ses> :  
<http://<hostname>:5555/gateway/SearchCruise/1.0/cruises>
  - c) Headers: Accept: **application/json**

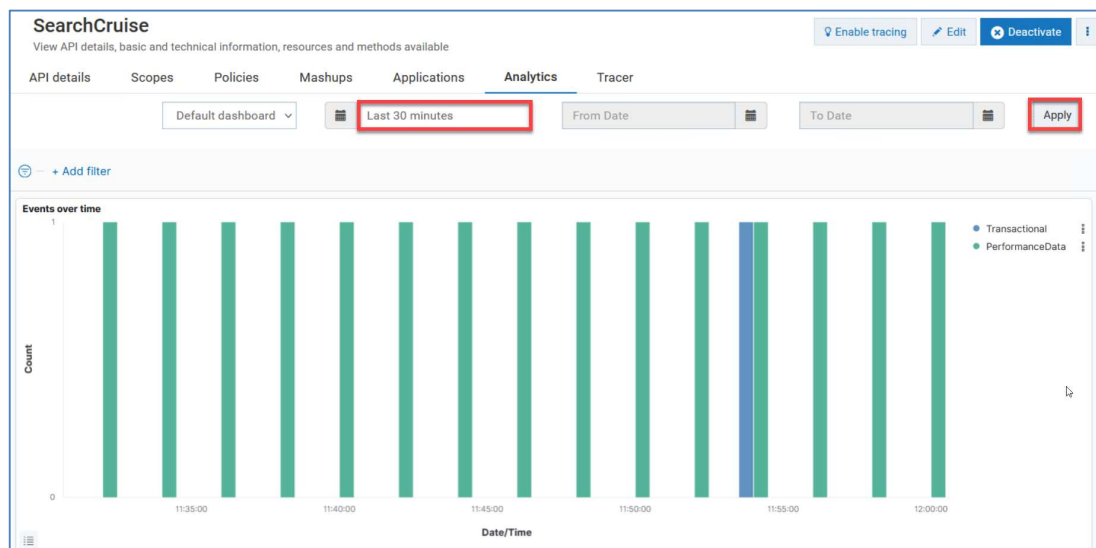
Run the request pressing the **Send** button. Ensure a status of **200 - OK** and cruise data is returned.

- 4) Now we look for the log data in API Gateway. Go back to **API Gateway** and select the API **SearchCruise**. Open tab **Analytics**.




*Note:* Your graph probably will look somewhat different.

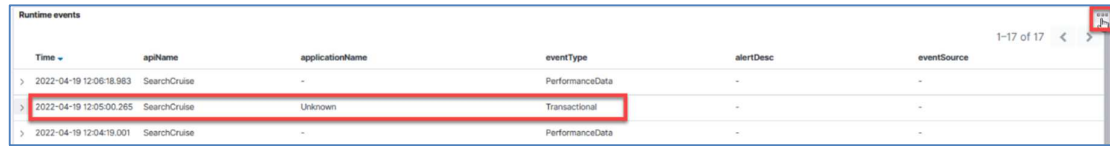
- a) Refine the filter condition:  
Time Range: **Last 30 minutes**  
Hit **Apply**.



*Note:* Your graph probably will look somewhat different.

- b) Scroll down to view the provided data in the dashboards like **Native service performance, API trend by response, ...**

- c) Scroll down to section **Runtime events**. Select an event of type **Transactional**. If necessary, click icon  to switch to full-screen mode:



Time	apiName	applicationName	eventType	alertDesc	eventSource
> 2022-04-19 12:06:18.983	SearchCruise	-	PerformanceData	-	-
> 2022-04-19 12:05:00.265	SearchCruise	Unknown	Transactional	-	-
> 2022-04-19 12:04:19.001	SearchCruise	-	PerformanceData	-	-

Click the **"greater than" (>)** at the beginning of the row. This will open the details for this event. Click on **View event with payload**.

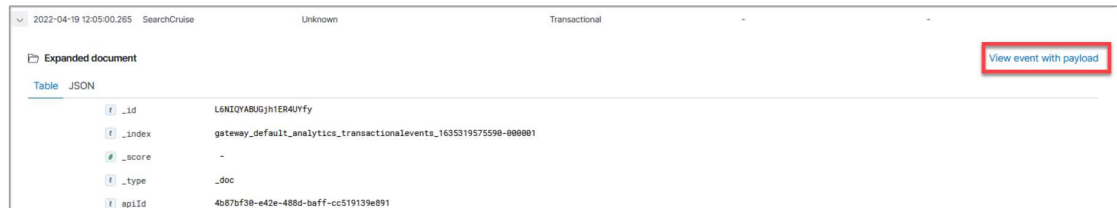
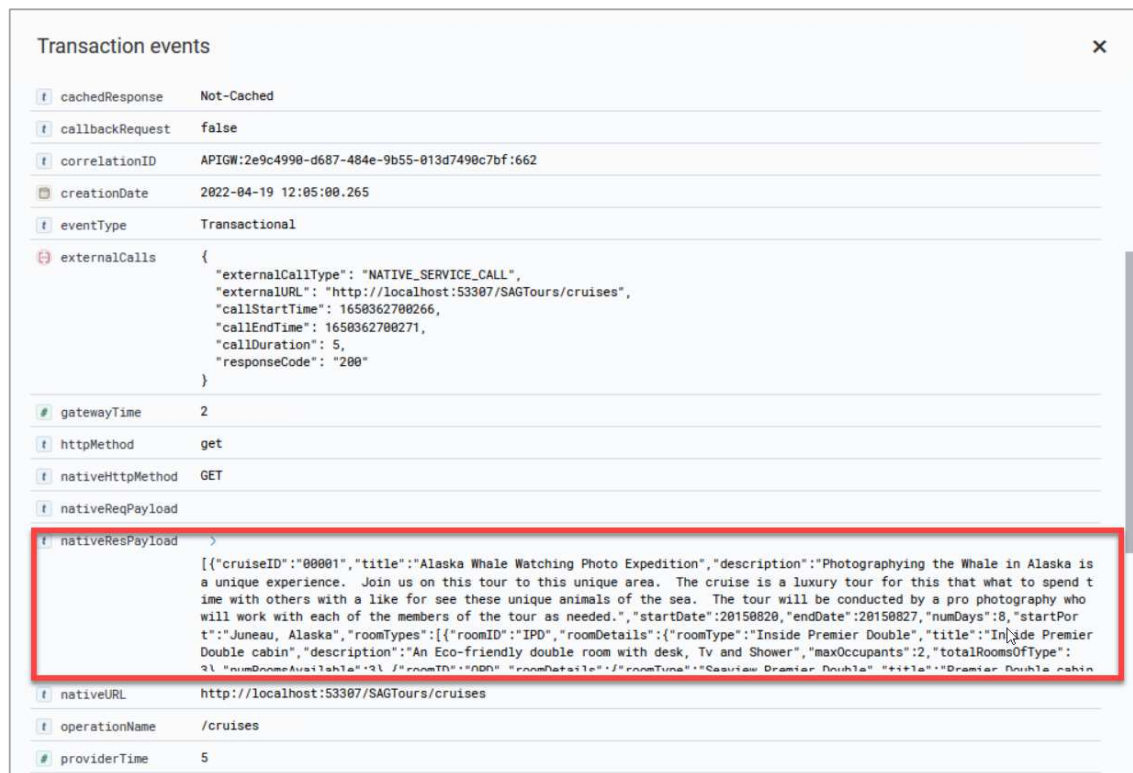


Table	JSON
<ul style="list-style-type: none"><li><b>_id</b>: L6N2QYABUGjh1ER4UffY</li><li><b>_index</b>: gateway_default_analytics_transactionalevents_1635319575590-000001</li><li><b>_score</b>: -</li><li><b>_type</b>: _doc</li><li><b>apiId</b>: 4b87bf30-e42e-488d-baff-cc519139e891</li></ul>	

To see the logged returned payload scroll down to property **nativeResPayload**.



Transaction events	
<b>cachedResponse</b>	Not-Cached
<b>callbackRequest</b>	false
<b>correlationID</b>	APIGW:2e9c4990-d687-484e-9b55-013d7490c7bf:662
<b>creationDate</b>	2022-04-19 12:05:00.265
<b>eventType</b>	Transactional
<b>externalCalls</b>	{ "externalCallType": "NATIVE_SERVICE_CALL", "externalURL": "http://localhost:53307/SAGTours/cruises", "callStartTime": 1650362700266, "callEndTime": 1650362700271, "callDuration": 5, "responseCode": "200" }
<b>gatewayTime</b>	2
<b>httpMethod</b>	get
<b>nativeHttpMethod</b>	GET
<b>nativeReqPayload</b>	
<b>nativeResPayload</b>	[{"cruiseID":"00001","title":"Alaska Whale Watching Photo Expedition","description":"Photographing the Whale in Alaska is a unique experience. Join us on this tour to this unique area. The cruise is a luxury tour for this that what to spend time with others with a like for see these unique animals of the sea. The tour will be conducted by a pro photography who will work with each of the members of the tour as needed.", "startDate":20150820,"endDate":20150827,"numDays":8,"startPort":"Juneau, Alaska","roomTypes":[{"roomID":"IPD","roomDetails":{"roomType":"Inside Premier Double","title":"Inside Premier Double cabin","description":"An Eco-friendly double room with desk, Tv and Shower","maxOccupants":2,"totalRoomsOfType":2,"numRoomsAvailable":2} / "roomID":"ODD" "roomDetails":{"roomType":"Seaview Premier Double" "title":"Premier Double cabin
<b>nativeURL</b>	http://localhost:53307/SAGTours/cruises
<b>operationName</b>	/cruises
<b>providerTime</b>	5

- 5) **Log out** from API Gateway.