



M P A
S I N G A P O R E

Singapore Maritime Data Hub (SG-MDH)

Static API User Guide & Documentation

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Document Change Logs

Version No.	Change Details	Date
0.1	Draft version of document, reflecting API specifications for static datasets	February 25, 2018
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1. Making API Calls

API calls need to be made programmatically in regular intervals to obtain the constant stream of data for your respective development or research needs. For illustration purposes, the API call below is being made via a third-party application – Postman.

Steps to making an API call:

1. Download and install the Postman from <https://www.getpostman.com> Fire it up!
2. Make sure Http method is set to GET
3. Enter the URL (refer to subsequent pages in this document) in the field request URL.
4. Enter your API Key under Headers
5. Click on the Send button.

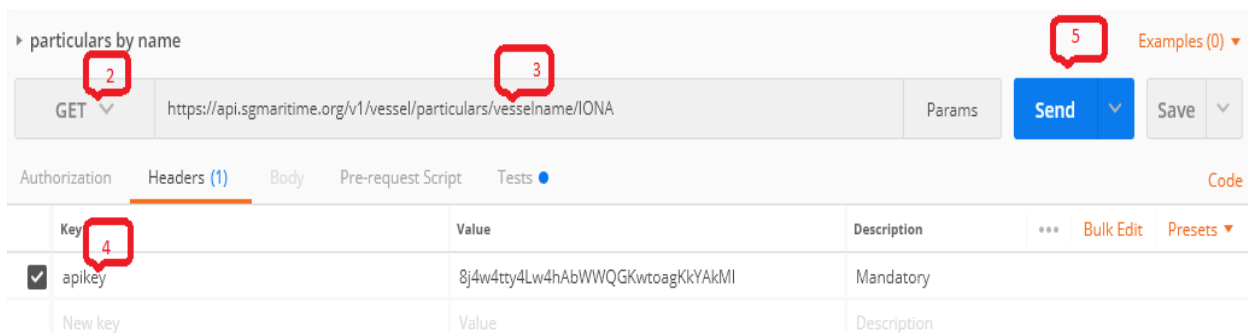


Figure 2-1

Figure 2-2 below shows the JSON response of an API call.

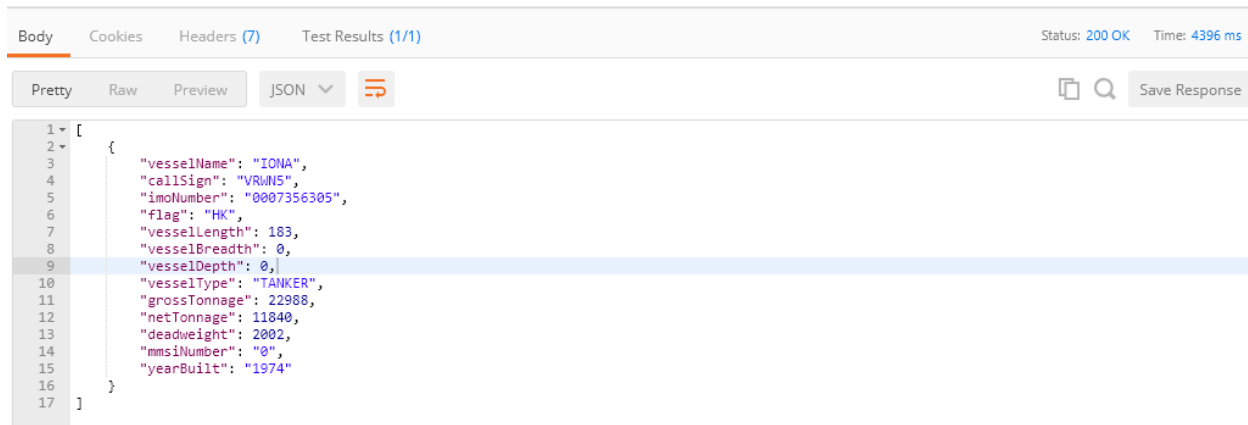


Figure 2-2: API (JSON) Response as shown on Postman

2. API Documentation

The following lists all static datasets that are served out via APIs. Specification for each dataset can be found in the rest of this document.

S. No	Dataset Name	Description
1	Static Datasets	Provides the static datasets data as a downloadable link

2.1 Static Datasets

The below are the different services exposed as APIs out of static datasets and all these APIs provides static datasets information as downloadable link. The individual API details can be found in coming sections.

S. No	API Name	Description
1	Tankers Monthly Arrivals	Provides the corresponding tankers monthly arrivals data in zip format.
2	Tankers Annual Arrivals	Provides the corresponding tankers annual arrivals data in zip format.
3	Bunkers Monthly Sales	Provides the corresponding bunkers monthly sales data in zip format.
4	Bunkers Annual Sales	Provides the corresponding bunkers annual sales data in zip format.
5	Cargo Monthly Throughput	Provides the corresponding cargo monthly throughput data in zip format.
6	Cargo Annual Throughput	Provides the corresponding cargo annual throughput data in zip format.
7	Container Annual Throughput	Provides the corresponding container annual throughput data in zip format.
8	Shipping Monthly Tonnage	Provides the corresponding shipping monthly tonnage data in zip format.
9	Shipping Annual Tonnage	Provides the corresponding shipping annual tonnage data in zip format.
10	Vessels Monthly Arrival	Provides the corresponding vessels monthly arrival data in zip format.
11	Vessels Annual Arrival	Provides the corresponding vessels annual arrival data in zip format
12	Vessel Monthly Calls	Provides the corresponding vessel monthly calls data in zip format
13	Vessel Annual Calls	Provides the corresponding vessel annual calls data in zip format.

2.1.1 Tankers Monthly Arrivals

URL	https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/tankerMonthlyArrivals			
Description	Provides the corresponding tankers monthly arrivals data in json format.			
Update Freq.	Monthly			
Request Details				
Headers	Name	Mandatory	Description	Sample
	apikey	Yes	This is the consumer key of the approved App created in the Developer Portal.	j4w4tty4Lw4hAbWWQGKwto
Response Details				
Headers	Name	Description	Sample	
	location	Location of the file	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/tanker-arrivals-75-gt-monthly.zip	

SAMPLE REQUEST & RESPONSE

Curl Request	curl -X GET --header "apikey: GQ9Mf6xjQufIC2Ji5OfyCm0BiRf" https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/tankerMonthlyArrivals		
Response Header	Key	Value	
	Location	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/tanker-arrivals-75-gt-monthly.zip	

2.1.2 Tankers Annual Arrivals

URL	https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/tankerAnnualArrivals			
Description	Provides the corresponding tankers annual arrivals data in json format.			
Update Freq.	Annually			
Request Details				
Headers	Name	Mandatory	Description	Sample
	apikey	Yes	This is the consumer key of the approved App created in the Developer Portal.	j4w4tty4Lw4hAbWWQGKwto
Response Details				
Headers	Name	Description	Sample	
	location	Location of the file	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/tanker-arrivals-75-gt-annual.zip	

SAMPLE REQUEST & RESPONSE

Curl Request	curl -X GET --header "apikey: GQ9Mf6xjQufIC2Ji5OfyCm0BiRf" https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/tankerAnnualArrivals		
Response Header	Key	Value	
	Location	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/tanker-arrivals-75-gt-annual.zip	

Response Header	Location	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/tanker-arrivals-75-gt-annual.zip
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2.1.3 Bunkers Monthly Sales

URL	https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/bunkerMonthlySales			
Description	Provides the corresponding bunkers monthly sales data in json format.			
Update Freq.	Monthly			
Request Details				
Headers	Name	Mandatory	Description	Sample
	apikey	Yes	This is the consumer key of the approved App created in the Developer Portal.	j4w4tty4Lw4hAbWWQGKwto
Response Details				
Headers	Name	Description	Sample	
	location	Location of the file	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/bunker-sales-monthly.zip	

SAMPLE REQUEST & RESPONSE

Curl Request	curl -X GET --header "apikey: GQ9Mf6xjQufIC2Ji5OfyCm0BiRf" https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/bunkerMonthlySales	
Response Header	Key	Value
	Location	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/bunker-sales-monthly.zip

2.1.4 Bunkers Annual Sales

URL	https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/bunkerAnnualSales			
Description	Provides the corresponding bunkers annual sales data in json format.			
Update Freq.	Annually			
Request Details				
Headers	Name	Mandatory	Description	Sample
	apikey	Yes	This is the consumer key of the approved App created in the Developer Portal.	j4w4tty4Lw4hAbWWQGKwto
Response Details				
Headers	Name	Description	Sample	
	location	Location of the file	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/bunker-sales-annual.zip	

SAMPLE REQUEST & RESPONSE

Curl Request	curl -X GET --header "apikey: GQ9Mf6xjQufIC2Ji5OfyCm0BiRf" https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/bunkerAnnualSales	
Response Header	Key	Value
	Location	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/bunker-sales-annual.zip

2.1.5 Cargo Monthly Throughput

URL	https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/cargoMonthlyThroughput			
Description	Provides the corresponding cargo monthly throughput data in json format.			
Update Freq.	Monthly			
Request Details				
Headers	Name	Mandatory	Description	Sample
	apikey	Yes	This is the consumer key of the approved App created in the Developer Portal.	j4w4tty4Lw4hAbWWQGKwto
Response Details				
Headers	Name	Description	Sample	
	location	Location of the file	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/cargo-throughput-monthly.zip	

SAMPLE REQUEST & RESPONSE

Curl Request	curl -X GET --header "apikey: GQ9Mf6xjQufIC2Ji5OfyCm0BiRf" https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/cargoMonthlyThroughput	
Response Header	Key	Value
	Location	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/cargo-throughput-monthly.zip

2.1.6 Cargo Annual Throughput

URL	https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/cargoAnnualThroughput			
Description	Provides the corresponding cargo annual throughput data in json format.			
Update Freq.	Annually			
Request Details				
Headers	Name	Mandatory	Description	Sample
	apikey	Yes	This is the consumer key of the approved App created in the Developer Portal.	j4w4tty4Lw4hAbWWQGKwto
Response Details				
Headers	Name	Description	Sample	
	location	Location of the file	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/cargo-throughput-annual.zip	

SAMPLE REQUEST & RESPONSE

Curl Request	curl -X GET --header "apikey: GQ9Mf6xjQufIC2Ji5OfyCm0BiRf" https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/cargoAnnualThroughput	
Response Header	Key	Value
	Location	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/cargo-throughput-annual.zip

2.1.7 Container Annual Throughput

URL	https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/containerAnnualThroughput			
Description	Provides the corresponding container annual throughput data in json format.			
Update Freq.	Annually			
Request Details				
Headers	Name	Mandatory	Description	Sample
	apikey	Yes	This is the consumer key of the approved App created in the Developer Portal.	j4w4tty4Lw4hAbWWQGKwto
Response Details				
Headers	Name	Description	Sample	
	location	Location of the file	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/container-throughput-annual.zip	

SAMPLE REQUEST & RESPONSE

Curl Request	curl -X GET --header "apikey: GQ9Mf6xjQufIC2Ji5OfyCm0BiRf" https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/containerAnnualThroughput		
Response Header	Key	Value	
	Location	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/container-throughput-annual.zip	

2.1.8 Shipping Monthly Tonnage

URL	https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/vesselShippingMonthlyTonnage			
Description	Provides the corresponding shipping monthly tonnage data in zip format.			
Update Freq.	Monthly			
Request Details				
Headers	Name	Mandatory	Description	Sample
	apikey	Yes	This is the consumer key of the approved App created in the Developer Portal.	j4w4tty4Lw4hAbWWQGKwto
Response Details				
Headers	Name	Description	Sample	
	location	Location of the file	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/registered-vessels-and-shipping-tonnage-monthly.zip	

SAMPLE REQUEST & RESPONSE

Curl Request	curl -X GET --header "apikey: GQ9Mf6xjQufIC2Ji5OfyCm0BiRf" https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/vesselShippingMonthlyTonnage		
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Response Header	Key	Value
	Location	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/registered-vessels-and-shipping-tonnage-monthly.zip

2.1.9 Shipping Annual Tonnage

URL	https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/vesselShippingAnnualTonnage			
Description	Provides the corresponding shipping annual tonnage data in zip format.			
Update Freq.	Annually			
Request Details				
Headers	Name	Mandatory	Description	Sample
	apikey	Yes	This is the consumer key of the approved App created in the Developer Portal.	j4w4tty4Lw4hAbWWQGKwto
Response Details				
Headers	Name	Description	Sample	
	location	Location of the file	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/registered-vessels-and-shipping-tonnage-annual.zip	

SAMPLE REQUEST & RESPONSE

Curl Request	curl -X GET --header "apikey: GQ9Mf6xjQufIC2Ji5OfyCm0BiRf" https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/vesselShippingMonthlyTonnage		
Response Header	Key	Value	
	Location	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/registered-vessels-and-shipping-tonnage-monthly.zip	

2.1.10 Vessels Monthly Arrival

URL	https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/vesselMonthlyArrivals			
Description	Provides the corresponding vessels monthly arrival data in zip format.			
Update Freq.	Monthly			
Request Details				
Headers	Name	Mandatory	Description	Sample
	apikey	Yes	This is the consumer key of the approved App created in the Developer Portal.	j4w4tty4Lw4hAbWWQGKwto
Response Details				
Headers	Name	Description	Sample	
	location	Location of the file	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/vessel-arrivals-75-gt-monthly.zip	

SAMPLE REQUEST & RESPONSE

Curl Request	curl -X GET --header "apikey: GQ9Mf6xjQufIC2Ji5OfyCm0BiRf" https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/vesselMonthlyArrivals	
Response Header	Key	Value
	Location	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/vessel-arrivals-75-gt-monthly.zip

2.1.11 Vessels Annual Arrival

URL	https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/vesselAnnualArrivals			
Description	Provides the corresponding vessels annual arrival data in zip format.			
Update Freq.	Annually			
Request Details				
Headers	Name	Mandatory	Description	Sample
	apikey	Yes	This is the consumer key of the approved App created in the Developer Portal.	j4w4tty4Lw4hAbWWQGKwto
Response Details				
Headers	Name	Description	Sample	
	location	Location of the file	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/vessel-arrivals-75-gt-annual.zip	

SAMPLE REQUEST & RESPONSE

Curl Request	curl -X GET --header "apikey: GQ9Mf6xjQufIC2Ji5OfyCm0BiRf" https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/vesselAnnualArrivals	
Response Header	Key	Value
	Location	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/vessel-arrivals-75-gt-annual.zip

2.1.12 Vessel Monthly Calls

URL	https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/vesselMonthlyCalls			
Description	Provides the corresponding vessel monthly calls data in zip format.			
Update Freq.	Monthly			
Request Details				
Headers	Name	Mandatory	Description	Sample
	apikey	Yes	This is the consumer key of the approved App	j4w4tty4Lw4hAbWWQGKwto

			created in the Developer Portal.
Response Details			
Headers	Name	Description	Sample
	location	Location of the file	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/vessel-calls-75-gt-monthly.zip

SAMPLE REQUEST & RESPONSE

Curl Request	curl -X GET --header "apikey: GQ9Mf6xjQufIC2Ji5OfyCm0BiRf" https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/vesselMonthlyCalls		
Response Header	Key	Value	
	Location	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/vessel-calls-75-gt-monthly.zip	

2.1.13 Vessel Annual Calls

URL	https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/vesselAnnualCalls			
Description	Provides the corresponding vessel annual calls data in zip format.			
Update Freq.	Annually			
Request Details				
Headers	Name	Mandatory	Description	Sample
	apikey	Yes	This is the consumer key of the approved App created in the Developer Portal.	j4w4tty4Lw4hAbWWQGKwto
Response Details				
Headers	Name	Description	Sample	
	location	Location of the file	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/vessel-calls-75-gt-annual.zip	

SAMPLE REQUEST & RESPONSE

Curl Request	curl -X GET --header "apikey: GQ9Mf6xjQufIC2Ji5OfyCm0BiRf" https://sg-mdh-api.mpa.gov.sg/v1/staticdatasets/vesselAnnualCalls		
Response Header	Key	Value	
	Location	https://mdh-production-static-datasets.s3-ap-southeast-1.amazonaws.com/vessel-calls-75-gt-annual.zip	

3. Error Codes Mapping

The following are the different HTTP error codes which have been handled and provided the meaningful response. The sample error message can be found in the coming sections of the document.

Error Code	Reason Phrase	Description
400	Bad Request	Invalid or missing request parameters
401	Unauthorized	Invalid or no credentials passed in the request
403	forbidden	Authorization credentials passed and accepted but account does not have permission
404	Not Found	The requested URI does not exist
405	Method not allowed	The requested resource does not support the supplied verb
409	Conflict	The request is not unique.
415	Unsupported Media Type	API does not support the requested content type.
422	Unprocessable Entity	The request is formed correctly, but due to some condition the request cannot be processed.
500	Internal Server Error	An internal error occurred when processing the request.
503	Service Unavailable	The service requested is currently unavailable.

3.1 Error Response format

Status Code	401 Unauthorized	Failed
Response Body	<pre>{ "error":{ "code":"401", "message":"Invalid apikey has been passed, please try with valid one", "timestamp":"Thu, 15 Nov 2018 03:32:40 UTC" } }</pre>	

4. List of Terms and Abbreviations

Mention all abbreviations/terminologies used in this document or by the integration. Below is an example of abbreviations which should be replaced with the relevant ones.

API	Application Programming Interface
URI	Uniform Resource Identifier
HTTP	Hypertext Transfer Protocol
HTTPS	HTTP over TLS
JSON	JavaScript Object Notation
REST	Representational State Transfer