Visitor Arrivals Forecast Dashboard and Model as a Service User Guide

V1.0

(for users granted access to Visitor Arrivals Forecast Dashboard and Stan Model as a Service)

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1. About Visitor Arrivals Forecast Dashboard and Stan Model as a Service (MaaS)

The Visitor Arrivals Forecast Dashboard allows selected users to view quarterly Visitor Arrivals forecast for 5 markets.

Stan Model as a Service (MaaS) allows selected users to leverage data from predictive models via Application Programming Interfaces (APIs) to derive actionable business insights.

2. Who will be granted access to Visitor Arrivals Forecast Dashboard and Stan Model as a Service (MaaS)?

Registered Stan users who contribute data to Stan (e.g. monthly Hotel Performance Data Submission), or participate in selected STB's data capability upskilling initiatives – such as Data Transformation Programme (DTP) and Data Analytics SHift (DASH) Programme, will be granted access to Visitor Arrivals Forecast Dashboard and Stan Model as a Service.

3. Accessing Visitor Arrivals Forecast Dashboard

Please note that the classification of the Visitor Arrivals Forecast dashboard is Confidential. You may refer to the Terms of Use for more information.

You may check your data visualisation access under **My Profile**. Users that have been granted **Data Visualisation Access** by their <u>Industry Admin</u> will be able to access the Visitor Arrivals Forecast Dashboard.

You may access the Visitor Arrivals Forecast Dashboard by hovering over "Data Visualisation" on the menu bar.



You will be redirected to the Visitor Arrivals Dashboard overview. Click on Visitor Arrivals Forecast to access the Visitor Arrivals Forecast sheet, which is updated every quarter.



In this release, you may access the quarterly forecast of Visitor Arrivals from the following 5 markets – Indonesia, China, Australia, India, Malaysia, as well as an overall Global forecast of Visitor Arrivals. The Global forecast of Visitor Arrivals is displayed on the left, while the Visitor Arrivals forecast by markets is displayed on the right. As a default, the chart on the right will display the top 3 markets (by Place of Residence) based on the historical 12 quarters Visitor Arrivals data. You may apply filters to compare across markets, up to a maximum of 3 selected markets at any point.





You may also choose to export a specific visualisation. Move your cursor over the visualisation you would like to export, and right click, before selecting **"Export"** function. You will be presented with the option to export the visualisation as an image or PDF. You are also able to download the data used to build that specific visualisation, by selecting 'Export data'.



4. Requesting for an Application Programming Interface (API) Key

You will require an Application Programming Interface (API) key to access Stan's Model as a Service (MaaS).

You may check your **User Role** under **My Profile**. If you are an <u>Industry Admin</u> or <u>Industry Sub-Admin</u>, you may request for an API key under **My Profile > API Key Request** tab. If you are an <u>Industry User</u> who requires access to Stan's MaaS API, please contact your organisation's Industry Admin to elevate your User Role to Industry Admin or Industry Sub-Admin. Do note that **Data Visualisation Access** is not required in order to request for an API key or access Stan's MaaS.

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Stan provides / projects. Requi	Application Programme Interfaces est for an API Key.	(APIs) including Model As A	Service (MaaS) APIs	to help developers der	ive insights for	their	
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API Key Reques	t			Can	ncel Save Ch	anges	

Under the **API Key Request** tab, check the box - "I would like to have an API key" and click **"Save Changes"**. The page will refresh to display your API key. To copy the API key, click on the icon on the right.

API Key Request

Stan provides App projects. Request	API Key Status: Active	their
API Key Request		Cancel

5. Accessing Stan Model as a Service (MaaS)

Please note that the classification of the data obtained from Stan Model as a Service (MaaS) is Confidential. You may refer to the Terms of Use for more information.

You may access Stan's MaaS with your API key. There are two ways in which you may access Stan MaaS - by hovering over **"Stan Services"** on the **menu bar**, or by clicking on the **quick links** below.

A Singapore Government Agency Website	
SINGAPORE TOURISM A About Stan Tourism Statistics Resources ~	≧~ Q
My Dashboard Data Visualisation v Stan Services ^	
Model as a Service	
	My Profile Quick Links
Access t e quick links below.	My Profile Change Password
Stan MaaS	
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STAN SERVICES	
Model as a Service	
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Leverage data from predictive	
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models via APIS od derive actionable business insights.	

You will be able to obtain quarterly forecast of Visitor Arrivals data. Clicking on "View API" will bring you to STB's Tourism and Information Services Hub (TIH) Developer portal page in a new tab.

	Home / State Services / Model as a Service Model as a Service
	⑦ How to access Stan's Model as a Service? You will need an API key to access Stan's Model as a Service API. If your Viser Role is Industry Admin or Industry Sub-Admin, you may request for an API key under My Profile → API Key Request page. You may also check the generated API Key along with the request status on the same page. If you are an industry User who requires access to Stan's "Model as a Service" API, piease contact your Industry Admin to elevate your User Role to Industry Admin or Industry Sub-Admin. You may check your User Role at My Profile page. Please note that the classification of the data obtained from Stan Model as a Service (MaaS) is Confidential. You may refer to the Terms of Use for more information.
©	Developer APIS Visitor Arrivals Forecast LINU Officiator Arrivals Data for Global, Andronesla, Mulaysia ViewAPI →

Find out more details about the structure and parameters to obtain your desired data via API integration with your company's systems on the TIH Developer portal page.

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About TIH	Getting Started APIs	News	Q
Model as a Servic	e API Documentation / visit	torArrivalsForecast	
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s API offers reque sired forecasted GI mbers. ne period refers to	esters the historical and estimat DP growth rate to refine the qu	ted Visitor Arrival information. Requesters can define the time period, visitors' place of residence or the uery results. As part of the response, the API will produce the corresponding year, quarter and Visitor A	e Arrival
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Resource URL https://api-uat. Query Parameters Name startYear (required) startQuarter (required)	Values 2020 1	ar and startQuarter to endVear and endQuarter inclusive. If endVear and endQuarter are not provided, tYear and startQuarter. Time period cannot start earlier than Q1 2008 and cannot end later than 4 quar tors/v1/arrival/model/forecast Description Starting year of time period, inclusive. Value must be 2008 or later. Refer to API Description for valid time periods. Quarter of starting year, inclusive. Only integers between 1 and 4 (i.e. Q1, Q4) are valid. Refer to API Description for valid time periods.	time trees

Do note that the first two parameters, "startYear" and "startQuarter", are required parameters that need to be filled in.

Resource URL			>
https://api-uat.stb	.gov.sg/analytics/visi	cors/v1/arrival/model/forecast	
Query Parameters			>
Name	Values	Description	
startYear (required)	2020	Starting year of time period, inclusive. Value must be 2008 or later. Refer to API Description for valid time periods.	
startQuarter (required)	1	Quarter of starting year, inclusive. Only integers between 1 and 4 (i.e. Q1, Q4) are valid. Refer to API Description for valid time periods.	
endYear	null	Ending year of time period, inclusive. endYear and endQuarter must not be earlier than startYear and startQuarter, and must be omitted or provided together. Refer to API Description for valid time periods.	'n
endQuarter	null	Quarter of ending year, inclusive. Only integers between 1 and 4 (i.e. Q1, Q4) are valid. endYear and endQuarter must not be earlier than startYear and startQuarter, and must be omitted or provided together. Refer to API Description for valid time periods.	
placeOfResidence	Global	Visitors' place of residence [Australia China India Indonesia Malaysia Global]. Default to Global forecast if not specified.	S
sgGdpRate	null	Forecasted year-on-year growth rate of Singapore's GDP. Assumed to compound at same rate for all future years within query time period. Valid inputs are a decimal value ranging betwee -0.15 (i.e15% growth rate) and 0.15 (i.e. 15% growth rate). Defaults to International Monetary Fund forecast if not specified.	e n
Try it out			>
Try it out API Key Authorize	SEND	RESET	

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Once you have filled in the parameters, click on API Key and input the API key that you have previously requested. Click "Ok" and "Send" to obtain your response.

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uery Parameters		Name:	X-API-Key		>
Name	Values	Value:	Value		
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placeOfResidence			Visitors' place of residence [Aus to Global forecast if not specifie	tralia China India Indonesia Mal d.	aysia Global]. Defaults
sgGdpRate			Forecasted year-on-year growth for all future years within query -0.15 (i.e15% growth rate) a Monetary Fund forecast if not s	rate of Singapore's GDP. Assumed to time period. Valid inputs are a decima nd 0.15 (i.e. 15% growth rate). Defau pecified.	compound at same rate al value ranging between Its to International
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