

# **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)?

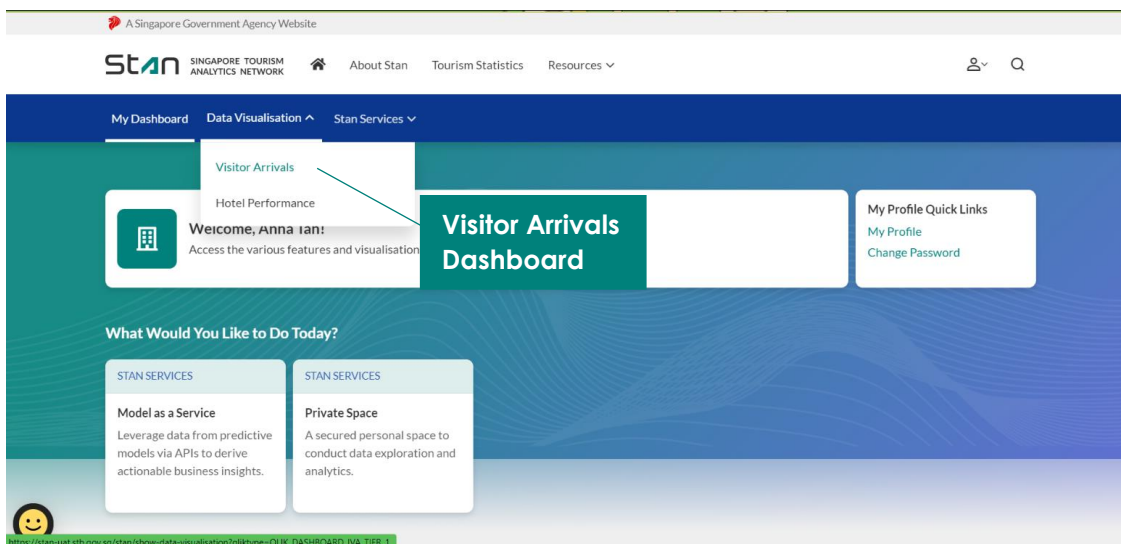
Registered Stan users who contribute data to Stan (e.g. monthly Hotel Performance Data Submission), or participate in selected STB's data capability upskilling initiatives – such as Data Transformation Programme (DTP) and Data Analytics SHift (DASH) Programme, will be granted access to Visitor Arrivals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

### 3. Accessing Visitor Arrivals Forecast Dashboard

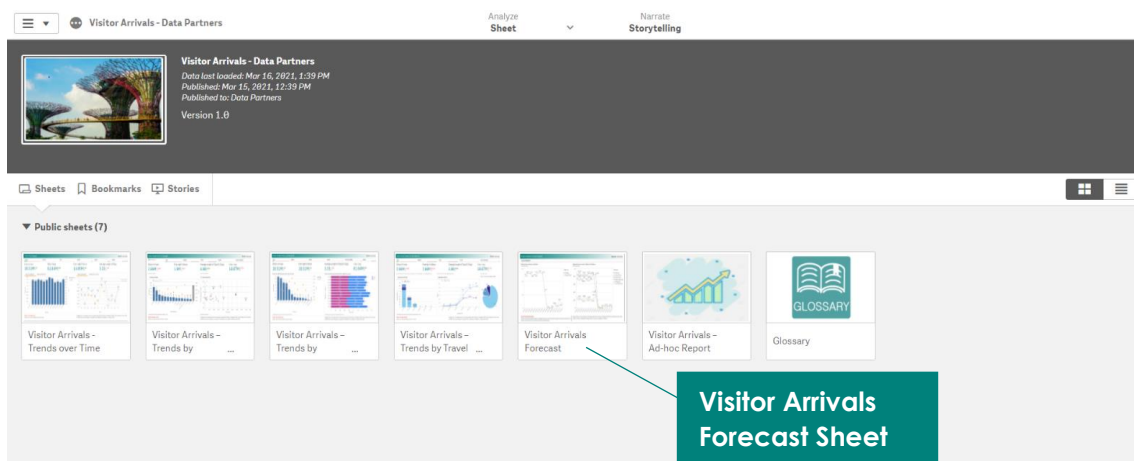
Please note that the classification of the Visitor Arrivals Forecast dashboard is Confidential. You may refer to the Terms of Use for more information.

You may check your data visualisation access under **My Profile**. Users that have been granted **Data Visualisation Access** by their Industry Admin 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.



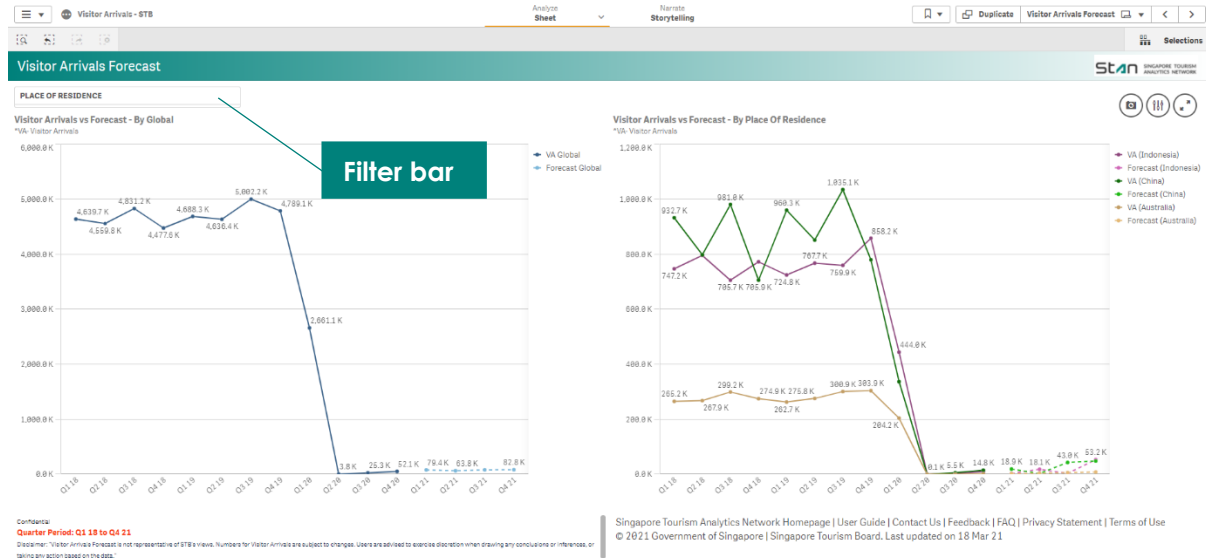
You will be redirected to the Visitor Arrivals Dashboard overview. Click on Visitor Arrivals Forecast to access the Visitor Arrivals Forecast sheet, which is updated every quarter.



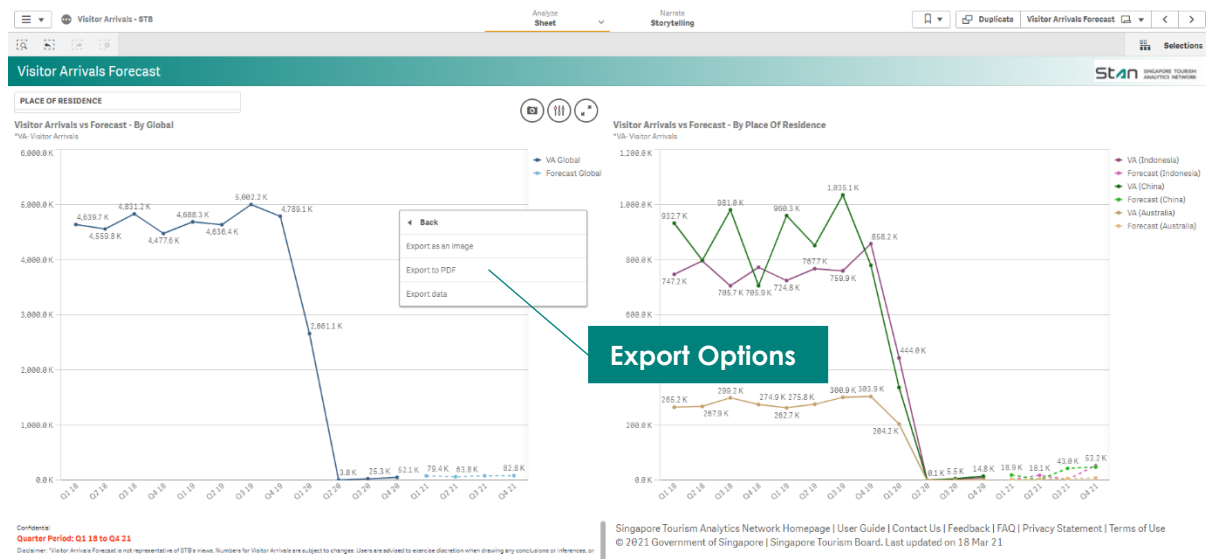
# Visitor Arrivals Forecast Dashboard and Model as a Service User Guide V1.0

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.

The solid line displays historical data, while the dotted line displays the forecast of visitor arrivals.



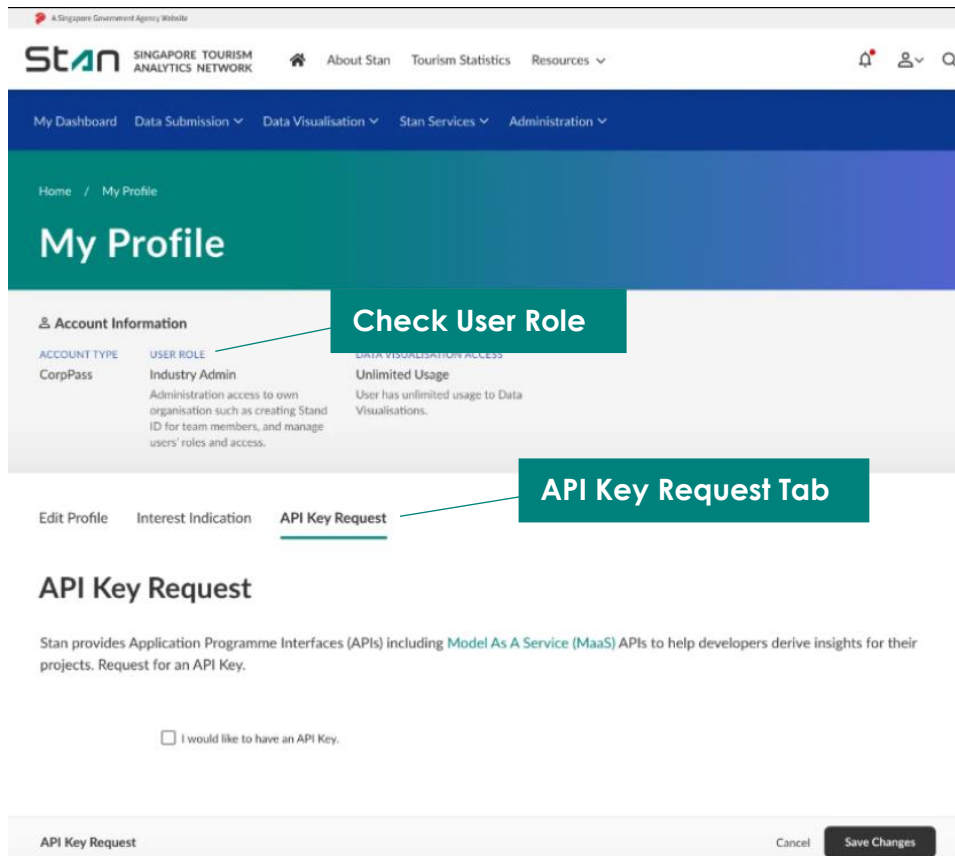
You may also choose to export a specific visualisation. Move your cursor over the visualisation you would like to export, and right click, before selecting **"Export"** function. You will be presented with the option to export the visualisation as an image or PDF. You are also able to download the data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

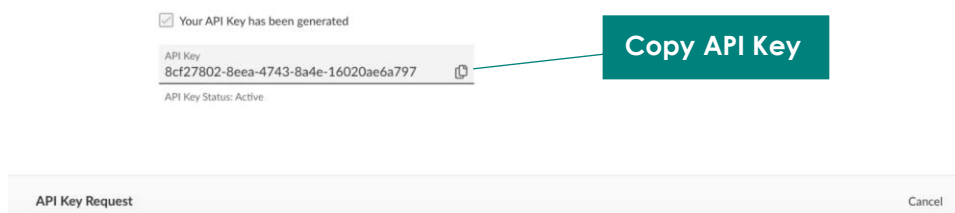
You may check your **User Role** under **My Profile**. If you are an Industry Admin or Industry Sub-Admin, you may request for an API key under **My Profile > API Key Request** tab. If you are an Industry User who requires access to Stan's MaaS API, please contact your organisation's Industry Admin to 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.



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

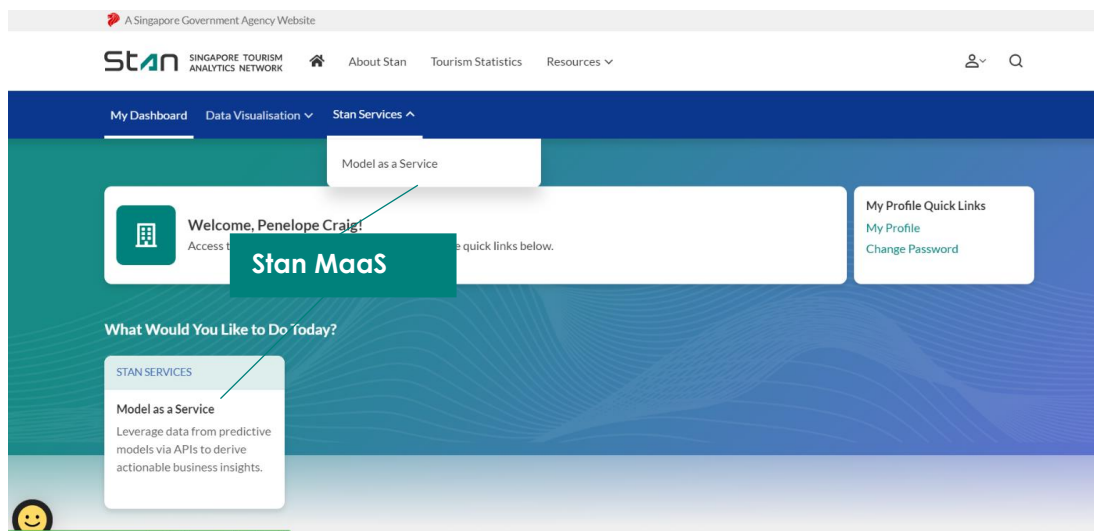
Stan provides Application Programme Interfaces (APIs) including Model As A Service (MaaS) APIs to help developers derive insights for their projects. Request for an API Key.



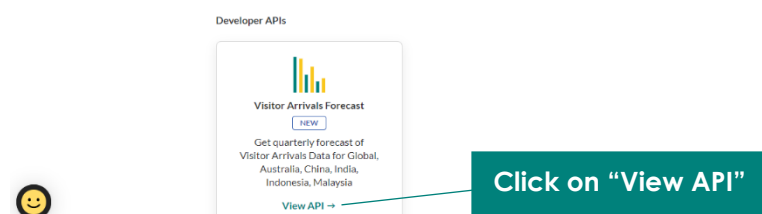
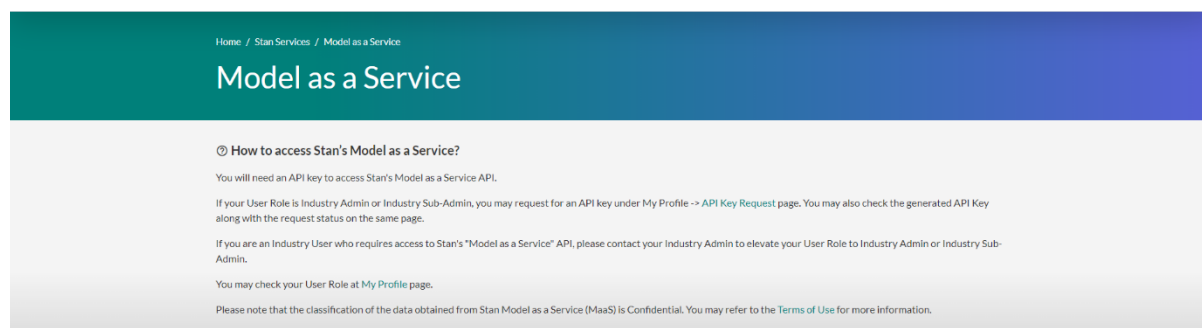
## 5. Accessing Stan Model as a Service (MaaS)

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.

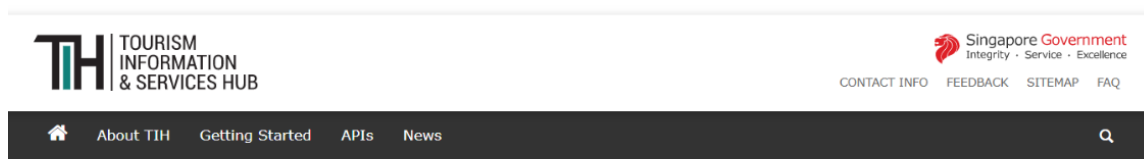
You may access Stan's MaaS with your API key. There are two ways in which you may access Stan MaaS - by hovering over **"Stan Services"** on the **menu bar**, or by clicking on the **quick links** below.



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.



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.



Model as a Service API Documentation / visitorArrivalsForecast

**GET** visitorArrivalsForecast

This API offers requesters the historical and estimated Visitor Arrival information. Requesters can define the time period, visitors' place of residence or the desired forecasted GDP growth rate to refine the query results. As part of the response, the API will produce the corresponding year, quarter and Visitor Arrival numbers.

Time period refers to the quarters between startYear and startQuarter to endYear and endQuarter inclusive. If endYear and endQuarter are not provided, time period refers to a single quarter referenced by startYear and startQuarter. Time period cannot start earlier than Q1 2008 and cannot end later than 4 quarters after last historical quarter.

Name	Values	Description
startYear <i>(required)</i>	2020	Starting year of time period, inclusive. Value must be 2008 or later. Refer to API Description for valid time periods.
startQuarter <i>(required)</i>	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	...	Ending year of time period, inclusive. endYear and endQuarter must not be earlier than

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

Name	Values	Description
startYear <i>(required)</i>	2020	Starting year of time period, inclusive. Value must be 2008 or later. Refer to API Description for valid time periods.
startQuarter <i>(required)</i>	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.
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]. Defaults to Global forecast if not specified.
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 between -0.15 (i.e. -15% growth rate) and 0.15 (i.e. 15% growth rate). Defaults to International Monetary Fund forecast if not specified.

Try it out

API Key Authorize... **SEND** RESET



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.

