

DEVELOPING A QUERY BUILDER FOR THE INTL. TRADE API

U.S. Census Bureau | Economic Indicators Division, Macroanalysis Branch

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Keywords:

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Summary:

The US Census Bureau's international trade API is a key resource compiling **US import and export data** for hundreds of countries and thousands of commodities, but much of this information is hidden from agencies, researchers, and members of the public who lack the technical skills to understand the API's jargon. This new query builder **bridges the gap for new users** by providing an intuitive process of selecting parameters and viewing datasets, teaching users the fundamentals of the API querying process while also providing easy access to data. This platform was developed with an **Angular frontend and a Flask API** for data processing, and will be integrated directly into the Census Bureau website.

AN API FOR EVERYONE

A User-Friendly Query Builder for the International Trade API

Economic Indicators Division

U.S. Census Bureau

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Any opinion or conclusion expressed herein are those of the authors and do not represent the views of the U.S. Census Bureau

coding it forward >



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INTERNATIONAL TRADE API

→ Provides trade data
between the United States and
its international trade partners
through the **Monthly
International Trade Datasets**
([MITD](#))

Example query:

[https://api.census.gov/data/timeseries/intltrade/exports/hs?get=E_COMMODITY,
ALL_VAL_YR,QTY_1_MO,QTY_1_MO_FLAG&time=20
13-01&COMM_LVL=HS2](https://api.census.gov/data/timeseries/intltrade/exports/hs?get=E_COMMODITY,ALL_VAL_YR,QTY_1_MO,QTY_1_MO_FLAG&time=2013-01&COMM_LVL=HS2)

28

Pages of
instructions

9m+

Successful
calls, April –
August 2024

141

Parameters
across all
endpoints

19,000+
Commodity
codes

246
Countries
and regions

9
Dataset
Endpoints

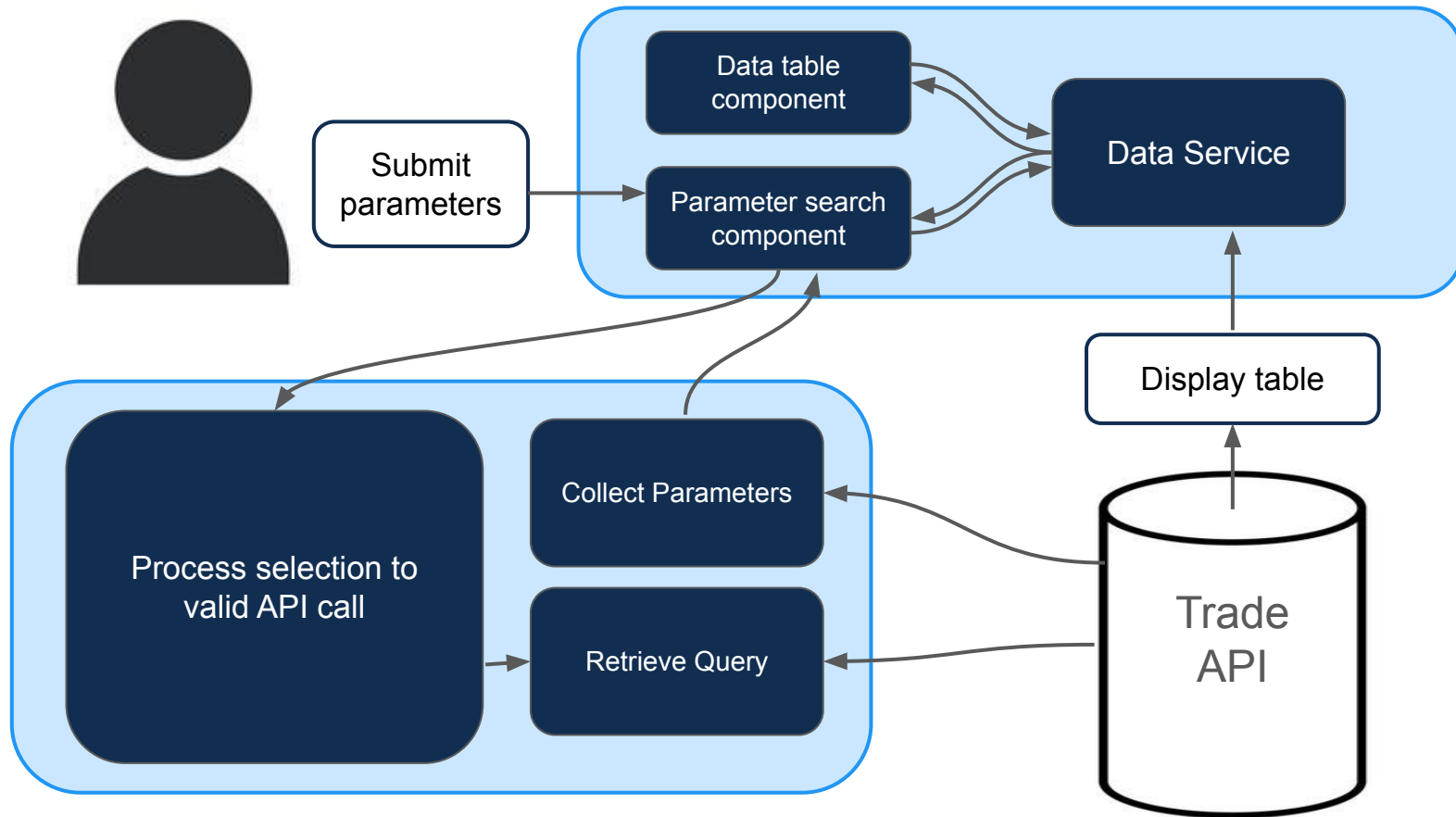
EXISTING TRADE DATA RESOURCES

	<u>International Trade API User Guide</u>	<u>USA Trade Online</u>	Our Goal
Provides access to the API's uniquely comprehensive datasets			
Doesn't require knowledge of trade API systems or API URL structure			
Provides access to the API call for automatic use			
Accessible without account creation			
Flexible data viewing and formatting			

The solution? A query builder that:

- constructs an API call from an intuitive parameter selection process
- provides efficient viewing and export access to trade data
- is fully integrated into the existing Census Trade API webpage

Angular Frontend



☐ Exports ☐ Imports

Select
Database:

Select a
time
interval:

From:

To:



Use 'time' parameter to represent dates



Use 'YEAR' and 'MONTH' to represent dates



Get database-specific parameters

Current API call:

<https://api.census.gov/data/timeseries/intltrade/>

Submit Query

FUTURE STEPS

- Deploying app into the Census webpage
- Potential additional functionality:
 - Summary level support
 - Optional account creation to store past queries
- Expanding similar tools to other APIs

THANK YOU!

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