Business Intelligence (BI) Provider

Customer Documentation



Data to win.



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Introduction

Netrivals monitors and retrieves data related to different marketplaces and e-commerces for all companies at an enterprise size that want to empower data visualization on their BI tools:

- Power BI
- Qlik
- Tableau
 - A Web Data Connector must be created to allow data download
- Data Studio
 - Limitations: 40Mb by endpoint (with <u>Supermetrics JSON/CSV Connector</u>)
- Sisense

Netrivals makes it possible for the technical and data stakeholders to connect directly to the information that is the most relevant to them and that has been gathered by our platform. Therefore, Netrivals becomes a powerful ally that allows them to craft customized dashboards, charts and graphs (and any other visualization that they may need) to generate value for their business. This feature is independent of the SaaS itself and it is closely related to the use of the API.



Goals

Netrivals connects directly to the most common BI tools to offer customers the possibility to download the raw data collected by the platform and leverage its use:

- Create dashboards, charts and reports with the look and feel you wish.
 - o Include Netrivals data into your own dashboards, and customize them as you prefer. You get to use the type of graph that works the best for you and make sure that your data visualization does not get affected by the limited typology of charts available.
- Join Netrivals data with your own datasets
 - All BI tools allow merging different data sources, like Finance, Marketing and/or CRM databases.
- Improve the usage of your BI tool
 - BI costs are high and, by increasing its usage, you reduce the cost per insight. This
 can help your company become more data-driven.
- Involve other departments in the analysis of the data provided by Netrivals
 - Spread out the value of Netrivals beyond the SaaS users, involving other departments other than the initial stakeholders.
- From Excel to Tableau
 - o If you have a Data or Business Intelligence department, you will easily connect the data source to your BI tool, like Tableau or QlikSense. If you do not count with a BI department itself, our solution will give you the chance to view the CSV content provided using Excel (or any other spreadsheet tool, like Google Sheets or LibreOffice).
- All data in one place
 - The amount of stores does not matter. All the data will be merged and delivered as one in each endpoint.



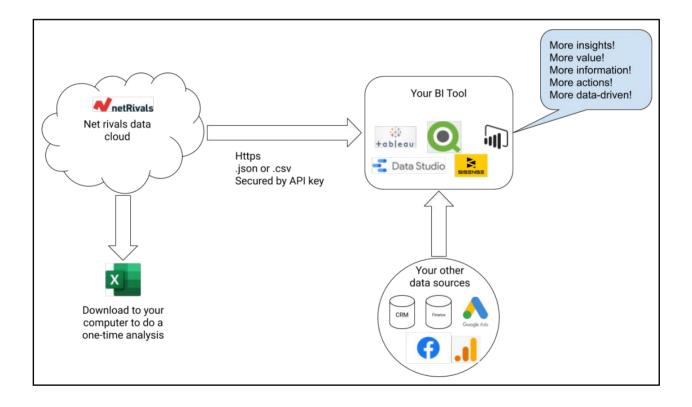


Technological schema

The technological schema of Netrivals is **simple and robust** to ensure compatibility with BI tools and allow main users to play with the data. Only a CSV WEB FILE connector is needed. The main URL where endpoints are located is:

https://endpoint.netrivals.com/bi/v1

The picture for the main structure would go as follows:





The main relation between endpoints goes as follows:

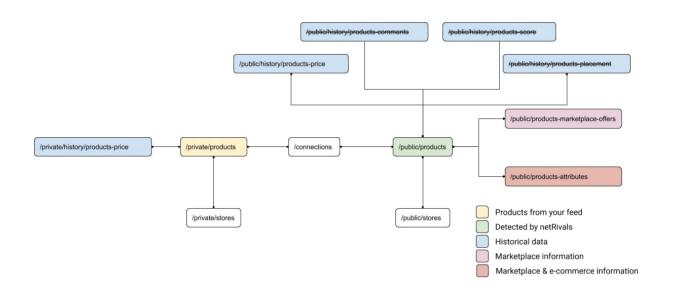


Table of main technical values:

Value	Definition
# EndPoints	9
Data formats	.csv .json (by default)
Data refreshment interval	6 hours
SLA	98%
Security	All connections are throw SSL over HTTPS
Authentication	User must have an active API KEY, generated internally
Authorization	One active API KEY can retrieve the data from authorized endpoints, based on user permissions. The data will contain all customer related stores



End Points

Private products:

End point:

/private/products

Description:

This endpoint delivers all data related to your feed of products. If you retrieve the data in json format, each object will correspond to one product; if you retrieve the data in csv, each row corresponds to one product.

Example of endpoint:

 $https://devendpoint.netrivals.com/bi/v1/private/products?api_key=\{your_api_key\}\&output=cs\ v$

Attribute	Attribute type	Definition
private_product_id	String	Netrivals internal unique identifier for your own products
store_id	Number	Store identifier
product_id	String	
country_code	Country Code	Store country location
currency	String	Currency used to describe the product price
title	String	
brand	String	
price	Number	
price_difference	Number	
shipping	Number	
stock	Boolean/Number	1 means there is stock, 0 means there isn't



stock_quantity	Number	
url	String	
detection_date	Date Hour Minute	
detection_timestamp	Number	
updated_date	Date Hour Minute	
updated_timestamp	Number	
<pre>public_products_amoun t</pre>	Number	Amount of connected public products
rival_product_min_pri ce	Number	For all connected rival products, the lowest price
rival_product_max_pri ce	Number	For all connected rival products, the highest price



Public products:

End point:

/public/products

Description:

This endpoint delivers the set of public products connected to your private products. If you retrieve the data in json format, each object will correspond to one product; if you retrieve the data in csv, each row corresponds to one product.

Example of endpoint:

https://devendpoint.netrivals.com/bi/v1/public/products?api_key={your_api_key}&output=csv

Attribute	Value type	Comments	Definition
<pre>public_product_i d</pre>	String	Not null, unique	Netrivals unique identifier for detected products
store_id	Number	Not null	Store identifier. Joinable to detected-stores.store_id
code	String	Not null	
subcode	String	Nullable	
url	String	Not null	Sanitization needed
country_code	Country Code	Not null	
currency	String	Not null	
title	String	Nullable	Product title
product_variant	String	Nullable	
price	Number	Not null	Product price
shipping	Number	Not null	
stock	Boolean/Number	Not null	1 means there is stock, 0 means there isn't
stock_quantity	Number	Nullable	



url	String	Not null	Sanitization needed
image	String	Nullable	
detection_date	Datetime	Not null	
update_date	Datetime	Nullable	
last_failure_dat e	Datetime	Nullable	
last_failure_tim e_stamp	Number	Nullable	

Connections:

End point:

/connections

Description:

This endpoint delivers the list of connections between your private products and the public products.

Example of endpoint:

https://devendpoint.netrivals.com/bi/v1/connections?api_key={your_api_key}&output=csv

Attribute	Value type	Comments	Definition
private_product_ id	String	Not null, unique	Internal unique identifier for your products
<pre>public_product_i d</pre>	String	Not null, unique	Internal unique identifier for detected products



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End point:

/private/stores

Description:

This endpoint delivers the set of private stores.

Example of endpoint:

https://devendpoint.netrivals.com/bi/v1/private/stores?api_key={your_api_key}&output=csv

Attributes:

Attribute	Value type	Definition
store_id	Integer	Unique identifier for private stores
domain	String	Domain of the private store

Public stores:

End point:

/public/stores

Description:

This endpoint delivers the set of public stores.

Example of endpoint:

https://devendpoint.netrivals.com/bi/v1/public/stores?api_key={your_api_key}&output=csv

Attribute	Value type	Definition	
store_id	Integer	Netrivals store id	
domain	String	Domain of the private store	



Public products history pricing:

End point:

/public/history/products-price

Description:

This endpoint delivers the history price for a given public product. The default period covers the last 90 days, and it gives prices on a daily basis.

Example of endpoint:

https://devendpoint.netrivals.com/bi/v1/public/historic/products-pricing?api_key={your_api_key}&output=csv

Attribute	Value type	Comments	Definition
<pre>public_product_id</pre>	String	Not null, unique	Netrivals unique identifier for public products
historic_price_date	Date	Not null	Date
historic_price_value	Number	Not null	Price



Marketplace offers:

End point:

/public/products-marketplace-offers

Description:

This endpoint delivers the offers set for marketplaces, with the seller information and product status.

Example of endpoint:

 $https://devendpoint.netrivals.com/bi/v1/public/products-marketplace-offers?api_key=\{your_api_key\}\&output=csv$

Attribute	Value type	Comments	Definition
rival_product_id	String	Not null, unique	Internal unique identifier for detected products
position			
seller_id			
seller_name			
product_status			
price			
url			
detection_date			
detection_timestamp			
update_date			
update_timestamp			
deleted_date			
deleted_timestamp			



Public products attributes:

End point:

/public/products-attributes

Description:

This endpoint delivers the attributes for all public products, like brand, score, amount of comments.

Example of endpoint:

 $https://devendpoint.netrivals.com/bi/v1/public/products-attributes?api_key=\{your_api_key\}\&output=csv$

Attributes (for csv output format):

Attribute	Value type	Comments	Definition
<pre>public_product_id</pre>	String	Not null, unique	Internal unique identifier for detected products
attribute_name	String	Not null	Attribute name
attribute_value	String	Nullable	Attribute value

Attributes (for json output format):

Attribute	Value type	Comments	Definition
<pre>public_product_id</pre>	String	Not null, unique	Internal unique identifier for detected products



Public products score history:

End point:

/public/history/products-score

Description:

This endpoint delivers the history score for all public products with a score assigned. The default period covers the last 90 days, and it gives scores on a daily basis.

Example of endpoint:

https://devendpoint.netrivals.com/bi/v1/public/products-attributes?api_key={your_api_key}&output=csv

Attribute	Value type	Comments	Definition
<pre>public_product_id</pre>	String	Not null, unique	Netrivals unique identifier for public products
score	Float	Not null	Score
date	Number	Not null	Date



Public products comments history:

End point:

/public/history/products-comments

Description:

This endpoint delivers the historical amount of comments for all public products with comments assigned. The default period covers the last 90 days, and it gives the amount of comments on a daily basis.

Example of endpoint:

 $https://devendpoint.netrivals.com/bi/v1/public/historic/products-comments?api_key=\{your_api_key\}\&output=csv$

Attribute	Value type	Definition
<pre>public_product_id</pre>	String	Netrivals unique identifier for public products
comments	Integer	Amount of comments
date	Date	Date



Private products history pricing:

End point:

/private/history/products-price

Description:

This endpoint delivers the history price for a given public product. The default period covers the last 90 days, and it gives prices on a daily basis.

Example of endpoint:

https://devendpoint.netrivals.com/bi/v1/public/historic/products-pricing?api_key={your_api_k ey}&output=csv

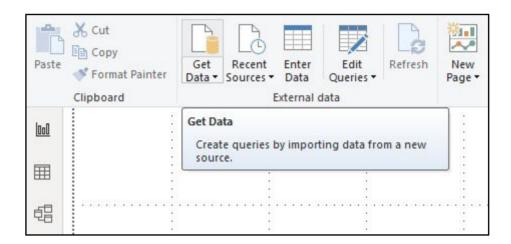
Attribute	Value type	Comments	Definition
private_product_id	String	Not null, unique	Netrivals unique identifier for private products
historic_price_date	Date	Not null	Date
historic_price_value	Number	Not null	Price

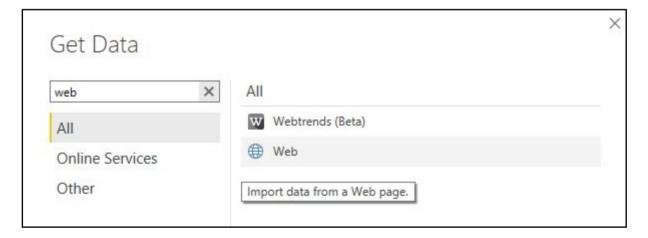


BI examples

<u>View the data:</u> All business intelligence tools have the same purpose: visualize and interact with large amounts of data.

Power BI

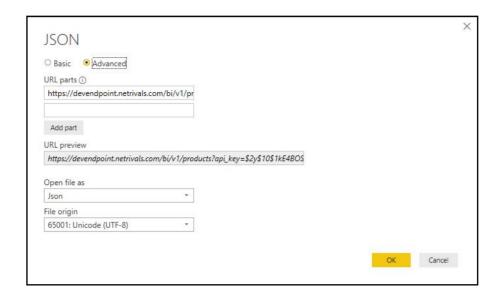




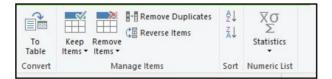
Power BI is the Microsoft solution for BI.







1.



2.



3.

4. Connect to data sources

- 5. Transform
 - a. It's recommended to transform the original data source columns into their more likely data type
- 6. Join data sources
- 7. Example of dashboard



<u>Tableau</u> is the major solution for BI. It was recently acquired by <u>Salesforce</u>.

- 1. Connect to data sources using Web File Connector
- 2. Transform.
- 3. Join data sources.
- 4. Example of dashboard.

QlikSense

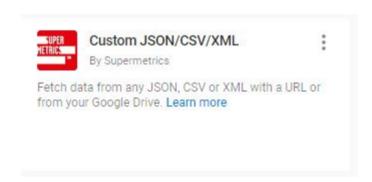
Olik is considered the second major solution for BI.

- 1. Connect to data sources.
- 2. Transform.
- 3. Join data sources.
- 4. Example of dashboard.

DataStudio

<u>DataStudio</u> is the free and the online Google solution for BI.

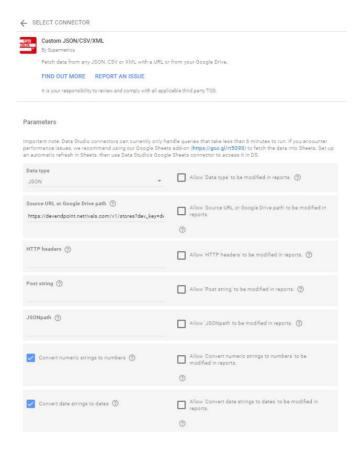
1. Connect to data sources



- a. Fill the form as follows:
 - i. Data type: CSV
 - ii. Source URL or Google Drive path: The Netrivals product path, including the API Key value
 - iii. Check the following fields:
 - 1. Convert numeric strings to numbers
 - 2. Convert date strings to dates
 - iv. Click on Connect button (top right)



b.



c. Once connected, check the fields types:

- i. Active: boolean
- ii. ASIN: string
- iii. Brand: string
- iv. Country_code: Geo → Country code
- v. Currency: string
- vi. Deleted_date: Date and time → Date Hour Minute (YYYYMMDDhhmm)
- vii. EAN: string
- viii. MPN: string
- ix. Netrivals_product_id: string
- x. Price: Currency (choose your own coin)
- xi. Price_difference: number
- xii. Price_max_competitor: number
- xiii. Product_id:
- xiv. REF: string
- xv. Rival_product_max_price: number
- xvi. Rival_product_min_price: number



xvii. Rival_products_num: number

xviii. Shipping: number

xix. Stock: boolean

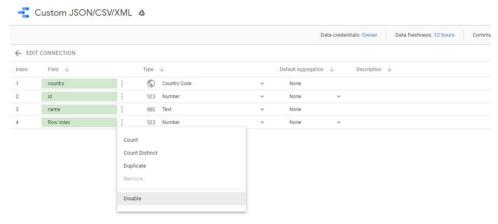
xx. Stock_quantity: number

xxi. Store_id: number

xxii. Title: string

xxiii. Updated_date: Date and time → Date Hour Minute (YYYMMDDhhmm)

xxiv. Url: string



e.

- 2. Transform.
- 3. Create dashboards and join data sources.
- 4. Example of dashboard (screenshots)
- 5. Example of dashboard (iframe)

Excel

Excel is the spreadsheet Microsoft solution.

- 1. Download the data
- 2. Open as CSV
- 3. Example of charts

Business Intelligence (BI) Provider

Customer Documentation

