API Basic Call Structures

[← Developer Information](https://datahelpdesk.worldbank.org/knowledgebase/topics/125589-developer-information)

The Indicators API supports two basic ways to build queries: a URL based structure and an argument based structure. For example, the following two requests will return the same data, a list of countries with income level classified as low income:

* Argument based: <http://api.worldbank.org/V2/country?incomeLevel=LIC>
* URL based: <http://api.worldbank.org/V2/incomeLevel/LIC/country>

**Query Strings**

The API support the following query strings in requests.

**Date and Date-Range:** Date-range by year, month or quarter that scopes the result-set.

Examples:

* <http://api.worldbank.org/v2/country/all/indicator/SP.POP.TOTL?date=2000>
* <http://api.worldbank.org/v2/country/chn;bra/indicator/DPANUSSPB?date=2012M01>

A range is indicated using the colon (:) separator.

Examples:

* <http://api.worldbank.org/v2/country/all/indicator/SP.POP.TOTL?date=2000:2001>
* <http://api.worldbank.org/v2/country/chn;bra/indicator/DPANUSSPB?date=2012M01:2012M08>
* <http://api.worldbank.org/v2/country/CHL/indicator/DP.DOD.DECD.CR.BC.CD?date=2013Q1:2013Q4>

Requests additionally support year-to-date values (YTD), which is useful for querying high frequency data.

* Example: <http://api.worldbank.org/v2/country/chn/indicator/DPANUSSPB?date=YTD:2013>

**Output Format:** The API supports the following four output formats.

* XML format: <http://api.worldbank.org/v2/country/all/indicator/SP.POP.TOTL?format=xml>
* JSON format: <http://api.worldbank.org/v2/country/all/indicator/SP.POP.TOTL?format=json>
* JSONP format: <http://api.worldbank.org/v2/country/all/indicator/SP.POP.TOTL?format=jsonP&prefix=Getdata>
* *Note: For JSONP format, prefix parameter must be specified.*
* JSON-stat format: <http://api.worldbank.org/v2/country/all/indicator/SP.POP.TOTL?format=jsonstat>
  + *Note: Refer*[*https://json-stat.org/*](https://json-stat.org/)*for more details.*

**Download Format:** The API supports the following three download formats.

* CSV Download (Downloads to ZIP file): <http://api.worldbank.org/v2/country/ind/indicator/AG.AGR.TRAC.NO?source=2&downloadformat=csv>
* XML Download (Downloads to ZIP file): <http://api.worldbank.org/v2/country/ind/indicator/AG.AGR.TRAC.NO?source=2&downloadformat=xml>
* EXCEL Download (Downloads to ZIP file): <http://api.worldbank.org/v2/country/ind/indicator/AG.AGR.TRAC.NO?source=2&downloadformat=excel>

**Page:** For paging through large result-sets. This allows users to indicate the page number requested from the record-set.

* Example: <http://api.worldbank.org/v2/country/all/indicator/SP.POP.TOTL?page=2>

**Per\_page:** For determining the number of results per page. The default setting is 50 results per page.

* Example: <http://api.worldbank.org/v2/country/all/indicator/SP.POP.TOTL?per_page=25>

**MRV:** Fetches most recent values based on the number specified.

* Example: <http://api.worldbank.org/v2/country/chn;ago/indicator/AG.AGR.TRAC.NO?mrv=5>

**MRNEV:** For fetching most recent non-empty values based on the number specified.

* Example: <http://api.worldbank.org/v2/country/chn;ago/indicator/AG.AGR.TRAC.NO?mrnev=5>

**Gap-fill:** (Y/N) Works with MRV. Fills values, if not available, by back tracking to the next available period (max number of periods back tracked will be limited by MRV number)

* Example: <http://api.worldbank.org/v2/en/country/ind;chn/indicator/DPANUSSPF?mrv=7&gapfill=Y>

**Frequency:** For fetching quarterly (Q), monthly (M) or yearly (Y) values. This feature currently works along with MRV. This query string is useful for querying high frequency data.

* Example: <http://api.worldbank.org/v2/en/country/ind;chn/indicator/DPANUSSPF?mrv=7&frequency=M>

**Multiple Indicators:** Data for multiple indicators can be queried from a single data source by providing the indicator codes separated by ";" (semicolon), as well as the source ID.

* Example: <http://api.worldbank.org/v2/country/chn;ago/indicator/AG.AGR.TRAC.NO;SP.POP.TOTL?source=2>

*Note: A maximum of 60 indicators can be used. A maximum of 1,500 characters are allowed between two back-slashes (/). A maximum of 4,000 characters are allowed in the entire URL.*

**Footnote:** For fetching footnote detail in data calls. "footnote=y" gives the footnote value for country, indicator and year.

* Example: <http://api.worldbank.org/v2/country/chn/indicator/SL.AGR.EMPL.ZS?footnote=y>

**Languages**

The following query returns all the languages supported by the World bank API v2: <http://api.worldbank.org/v2/languages>

When no language is specified English is assumed. The following languages are available:

| Code | Language |
| --- | --- |
| en | English |
| es | Spanish |
| fr | French |
| ar | Arabic |
| zh | Chinese |

**Local Languages**

Local language translations are available for some countries. Any call to the API can be prefixed with a language code to retrieve localized results where available. The following local languages are available:

| Code | Language |
| --- | --- |
| bg | Bulgarian |
| de | German |
| hi | Hindi |
| id | Indonesian |
| ja | Japanese |
| km | Khmer |
| ko | Korean |
| mk | Macedonian |
| mn | Mongolian |
| pl | Polish |
| pt | Portuguese |
| ro | Romanian |
| ru | Russian |
| sq | Albanian |
| th | Thai |
| tr | Turkish |
| uk | Ukrainian |
| vi | Vietnamese |

A backslash followed by the country code after http://api.worldbank.org/v2/ in an API call gives localized results.

For example, to retrieve the country name of Vietnam in Vietnamese language you would use the following query: <http://api.worldbank.org/v2/vi/country/vn>

*Note: The translated local language country and region names are not available for all countries.*

**Delimiters**

**Range:** Use a colon : to indicate a range (for numeric values only). For example, 5:10 specifies the numeric value range from 5 to 10.

* Example: <http://api.worldbank.org/v2/country/chn;ago/indicator/AG.AGR.TRAC.NO;SP.POP.TOTL?source=2&date=2000:2010>

**Logical AND:** Use a semicolon ; to represent logical “AND”. For example, us;ge specifies the United States AND Georgia.

* Example: <http://api.worldbank.org/v2/country/us;ge/indicator/AG.AGR.TRAC.NO>

**Responses**

Retrieving indicator data about countries is one common use of the API.

For example, the following is a call for 2006 data on the GDP of Brazil: <http://api.worldbank.org/v2/country/br/indicator/NY.GDP.MKTP.CD?date=2006>

**Response Format**

By default, all requests will respond with valid XML. To receive the response in JSON format, provide format=json in any request.

**Sample valid request response:**

<wb:sources xmlns:wb="http://www.worldbank.org" page="1" pages="1" per\_page="50" total="30">

<wb:source id="11">

<wb:name>Africa Development Indicators</wb:name>

<wb:description/>

<wb:url/>

<wb:dataavailability>Y</wb:dataavailability>

<wb:metadataavailability>Y</wb:metadataavailability>

</wb:source>

**Sample invalid request response:**

1.

<wb:error xmlns:wb="http://www.worldbank.org">

<wb:message id="150" key="Language is not yet supported in the API">Response requested in an unsupported language.</wb:message>

</wb:error>

2.

<wb:error xmlns:wb="http://www.worldbank.org">

<wb:message id="120" key="Invalid value">The provided parameter value is not valid</wb:message>

</wb:error>

*Note: See*[*Error Codes*](https://datahelpdesk.worldbank.org/knowledgebase/articles/898620-api-error-codes)*for a full listing of possible errors.*

**Limitations**

You cannot currently sort any requests. Generally results are returned in a reasonable order (i.e. alpha), but that order cannot be controlled.