

PxWebApi 2.0

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Background



Background

- PxWeb
- What is an API (Application Program Interface)?
- For whom is the API?
 - For our users
 - And for ourself
- Pilot in 2013
 - Economical quick statistics



The screenshot shows a web browser window displaying the PxWeb interface. The browser title is "Table: Deaths by region, age, period and sex. - Microsoft Internet Explorer". The address bar shows the URL: "http://w10sscbl/pwweb2004sql/Dialog/varval.asp?ma=BE10102E6ci=Deaths+by+region+%2C+age+%2C+period+...".

The interface features three "PX-WEB" logos at the top. Below them, the breadcrumb navigation reads "Database - Subject area - Table". The main heading is "Table: Deaths by region, age, period and sex." with a link for "Information details, Footnotes".

A message prompts the user: "Mark your selections and choose between table on screen and file format. [Marking t...](#)".

The main table has three columns: "region", "age", and "period". The "region" column has a dropdown menu with options: "00 Sweden", "01 Stockholms län", "0114 Upplands-Västby", "0115 Vallentuna", "0117 Österåker", "0120 Värmdö", and "0123 Järfälla". The "age" column has a dropdown menu with options: "age", "10-years classes", and "5-years classes". The "period" column has a dropdown menu with options: "1992", "1993", "1994", "1995", "1996", and "1997".

Below the table, there are search fields and checkboxes for "Text start". A message states: "The table contains a total of 363168 data cells (30264 rows and 12 columns) Do...".

Another message says: "Presentation on screen is limited to 1000 rows and 50 columns." Below this are input fields for "Number of selected data rows" (set to 0) and "Number of selected data columns" (set to 0).

A "Continue" button is present. Below it is a dropdown menu for "Table on screen, layout 1".

At the bottom, there are flags for Sweden and Finland, and a footer note: "This page was created by PX-Web. A member of the PC-Axis family."

Version 1

Thing we hadn't expected

- Identifiers for the tables.
- Address to the tables
- Missing metadata
- "Strange" metadata
- Many wish to be able to fetch data via GET.



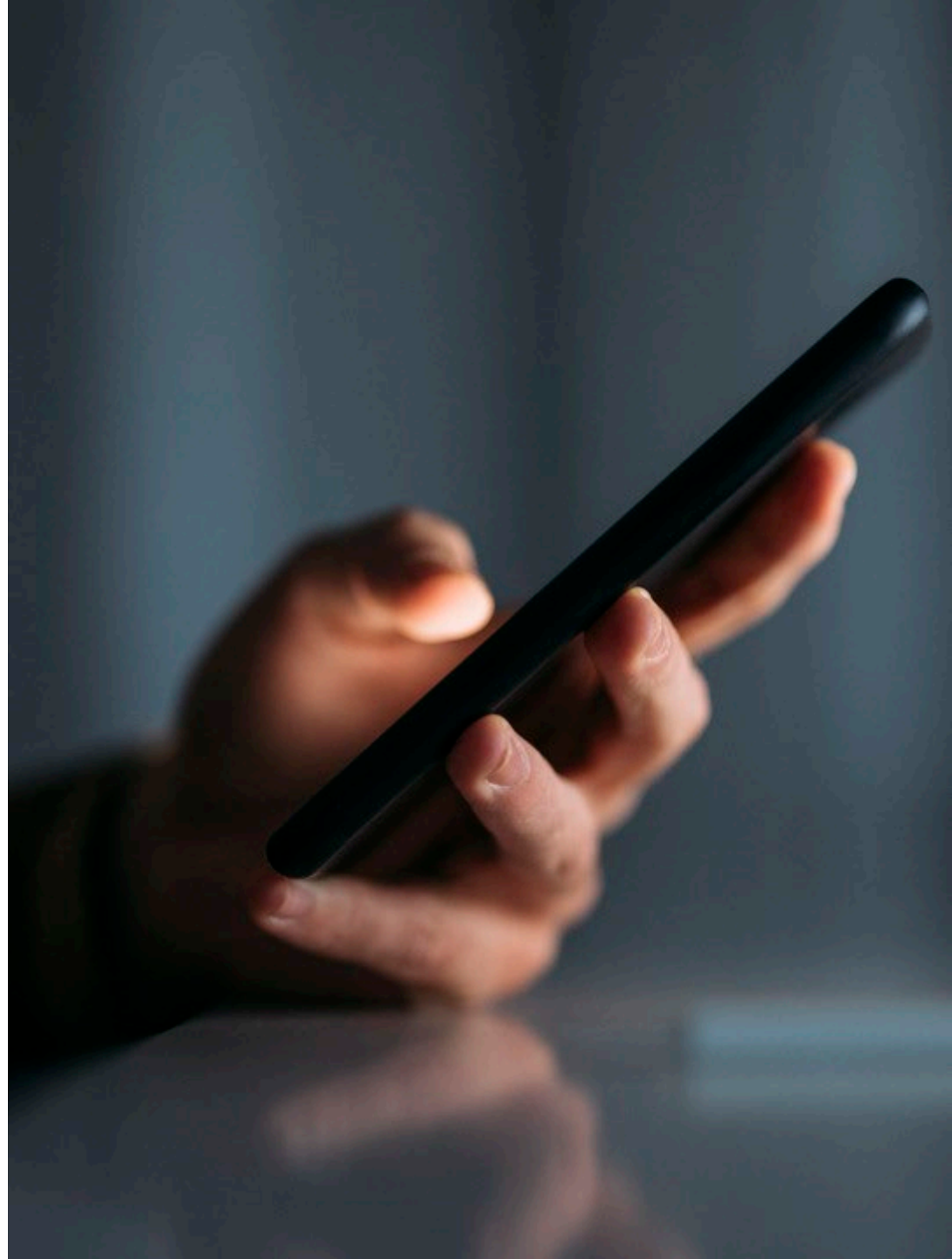
Version 2.0



Version 2

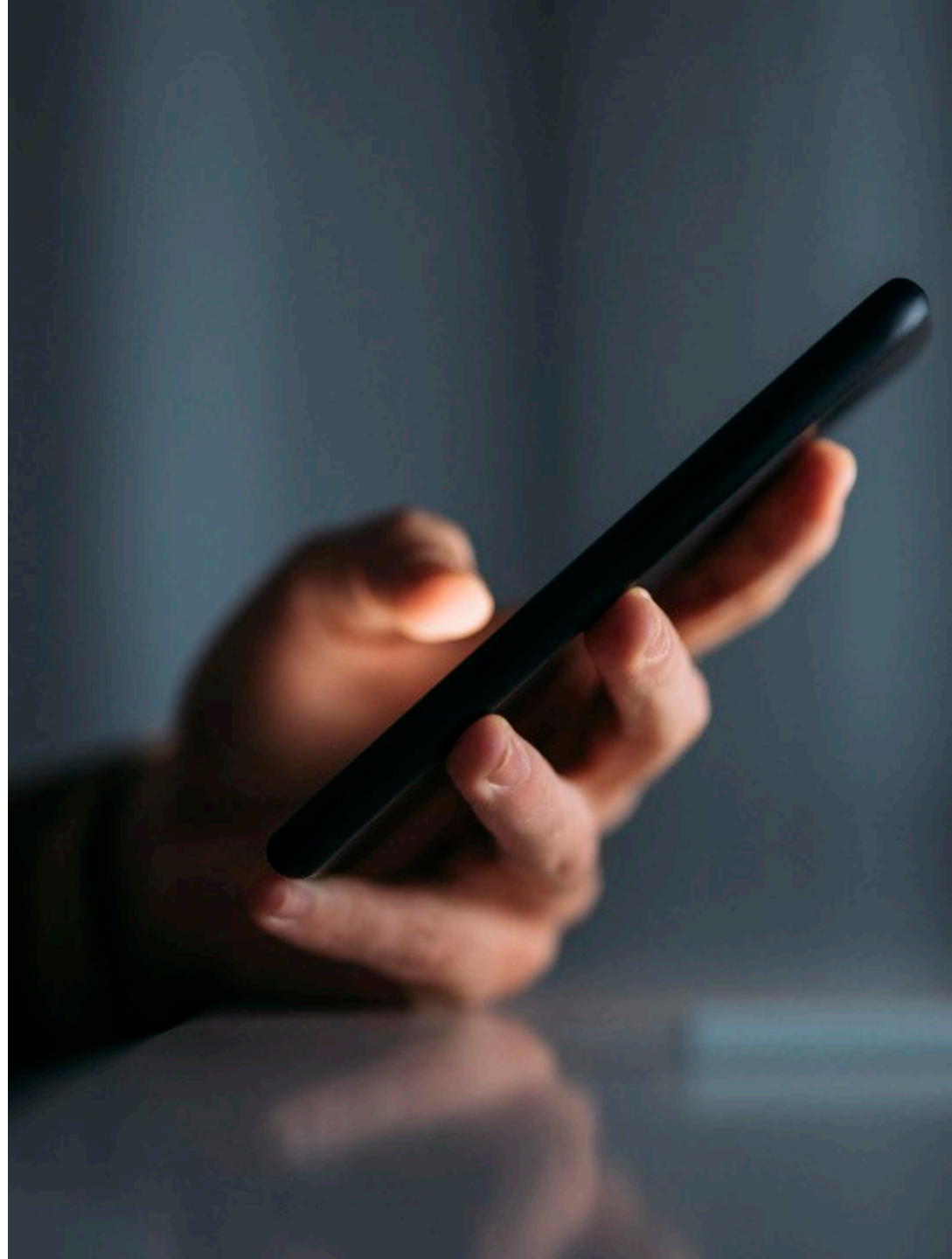
Get around the issues in version 1

- New identities for the tables.
- Other address to tables.
- More metadata.
- Support GET for fetching data.



Version 2 continued

- Self-descriptive
- More powerful expressions for fetching data.
- Specified it using Open API (3.0.2)
 - Easier for other to consume.
- Serve as base for PxWeb 2.0
 - More functionality



Example



Choose table



Choose variable



Show result

Search in Example:

Search

AggregallowedNo

aggregations

AttributesCellnotes

Autopen

Descriptiondefault

Doublecolumn

error

/navigation

Example



Choose table



Choose variable



Show result


Search in Example:

Search

/tables


 AggregallowedNo

 aggregations

 AttributesCellnotes

 Autopen

 Descriptiondefault

 Doublecolumn

 error



[Choose table](#)



[Choose variable](#)




[Show result](#)

`/tables/{id}/metadata`

Population by region, period and sex

Choose variables

▼ **About table**

 List view

Region


Select all

Deselect all

Beginning of word

Search 

Selected 0 of total 21

 Optional variable

- 03 Uppsala county
- 04 Södermanland county
- 05 Östergötland county

Period Mandatory*

Select all

Deselect all

Selected 1 of total 2


- 2008
- 2007

Sex

Select all

Deselect all

Selected 0 of total 2

 Optional variable

- men
- women



[Choose table](#)



[Choose variable](#)



Show result

Population by region, period and sex

/tables/{id}/data

Result

▼ About table

▼ Show result as...

▼ Edit and Calculate

▼ Save result as...

▼ Save your query

▼ Hide empty rows

 Pivot manual

 Pivot clockwise

 Pivot counterclockwise

 Fullscreen

	2007		2008	
	Men	Women	Men	Women
03 Uppsala county	160,281	162,989	162,386	164,802
04 Södermanland county	131,764	133,426	132,907	134,617
05 Östergötland county	210,531	210,278	212,026	211,143
06 Jönköping county	166,405	167,205	167,218	168,028

Obs:

The tables show the conditions on December 31st for each respective year according to administrative subdivisions of January 1st of the following year

region: 03 Uppsala county

Since 1 January 2007, Uppsala county has been expanded to include Heby municipality. Please note that the figures for the county are not comparable with earlier figures.

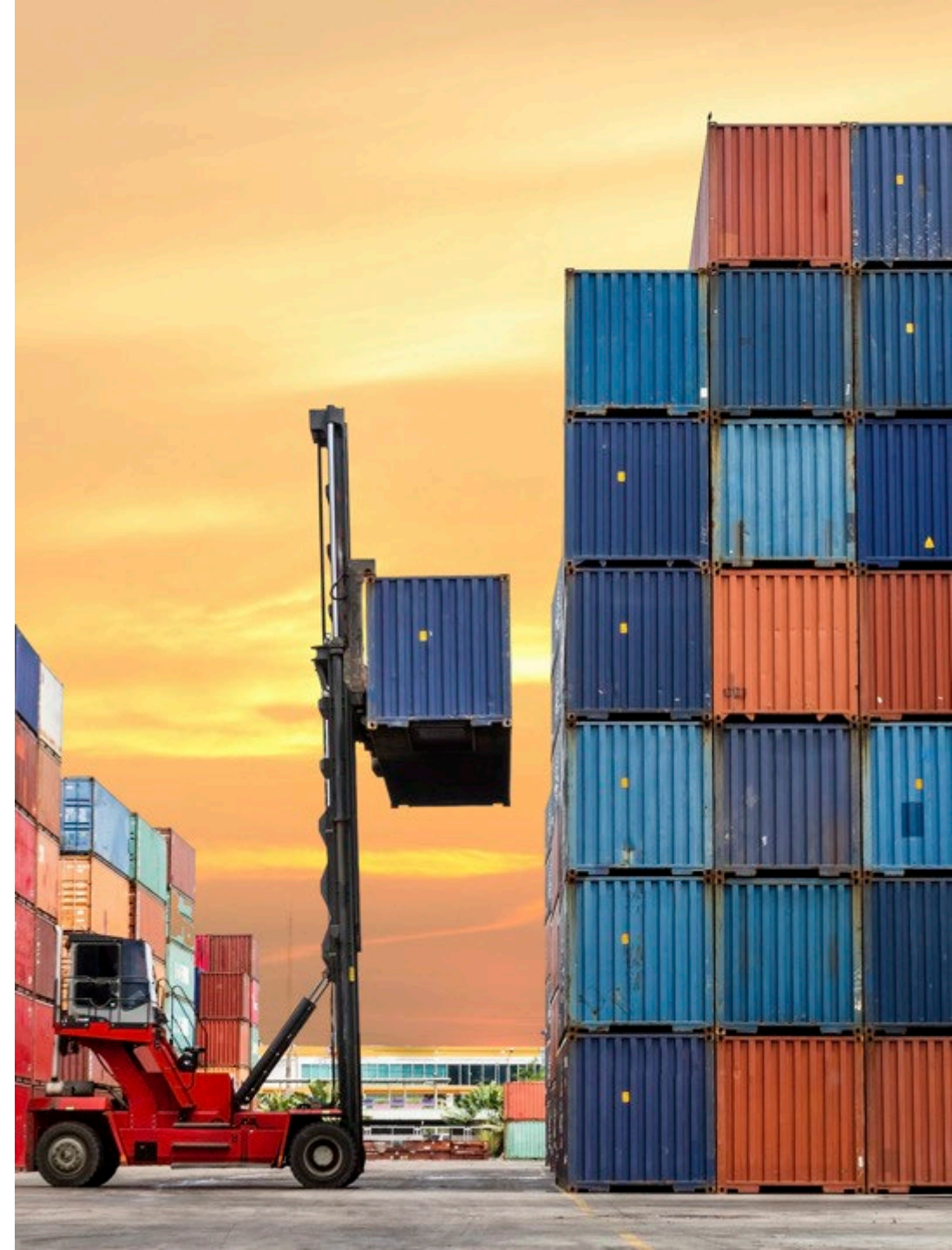


Selection expressions for fetching data

Selection expression is in the form

```
valuecodes[variable_code]=value_expression1,  
value_expression_2, ...
```

Value expressions are either the value code or special expressions.





Value expressions

- * - zero or many characters.
- ? - exactly one character.
- **TOP(N,Offset)** – First N number of values.
- **BOTTOM(N,Offset)** – Last N number of values.
- **RANGE(X,Y)** – From value with code X to value with code Y.
- **FROM(X)** - From value with code X and all values after.
- **TO(X)** From the first value to the value with code X.



Demo

