

PxWebApi v2

From Launch to Maturity

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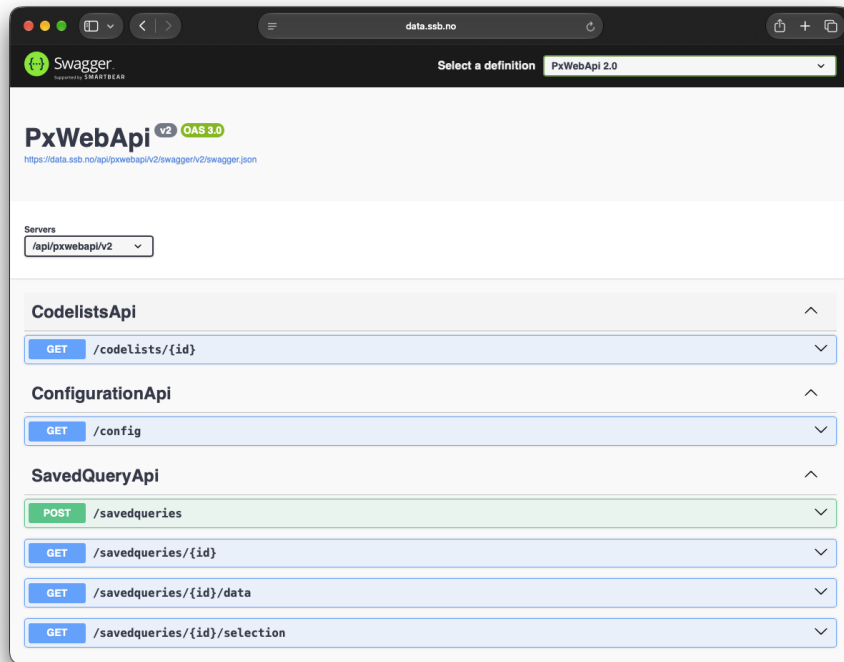
PxWebApi v2: From Launch to Maturity

- Why Did We Build v2?
- One year later
- What have we learned?
- Looking forward



Why Did We Build v2?

- Modern technology stack
- Separate the UI and API
- Easier maintenance
- Open-source collaboration
- Sustainable platform for the future



Why Did We Build v2?

- **HTTP GET & POST Support:** Unlike v1, which primarily relied on POST requests with JSON payloads, v2 supports GET requests allowing entire queries to be defined directly in the URL
- **Stable URL Structure:** Built on a more resilient RESTful architecture less vulnerable to changes in underlying table hierarchies
- **Advanced Filtering:** Supports wildcard operators (? and *) and precision expressions for selective data extraction
- **Metadata Access:** Exposes richer metadata for automated reporting, apps, and dashboard integrations (such as Excel and Power BI)
- **OpenAPI Specification:** Enables interactive browser testing via Swagger UI and allows developers to automatically generate client SDKs in Python, R, JavaScript, C#, ...

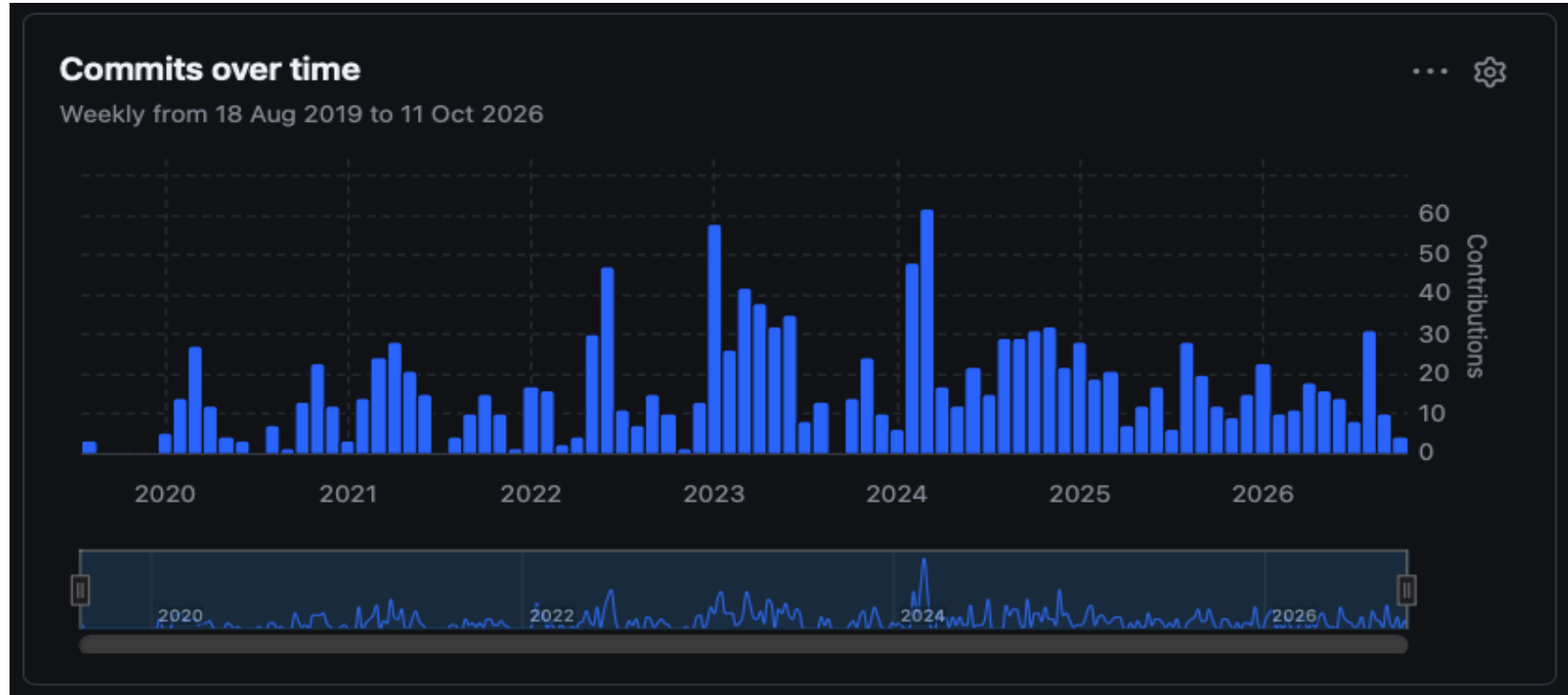
One Year Later

- Stabilization
- Quality improvements
- Documentation
- New features and fixes
 - Install script
 - Same folder for API v1 and v2 Menu2.xml + name of index folder
 - (CNMM) filtering on rootNode.
 - Adjusted the selection algorithm
 - Automatic clear cache after reindexing
 - Added Paths (with sort codes) in the table response
 - Bug in the Parquet file format.
 - Changed the search indexing (tokenizers, AND, fields and more)
 - File formats exclude zero and missing rows
 - Reading of aggregations
 - And more...

Operations in the API (paused)

- We were worried about being exploited by malicious actors
- Give it an extra tough
- Lack of time have put this on pause for now

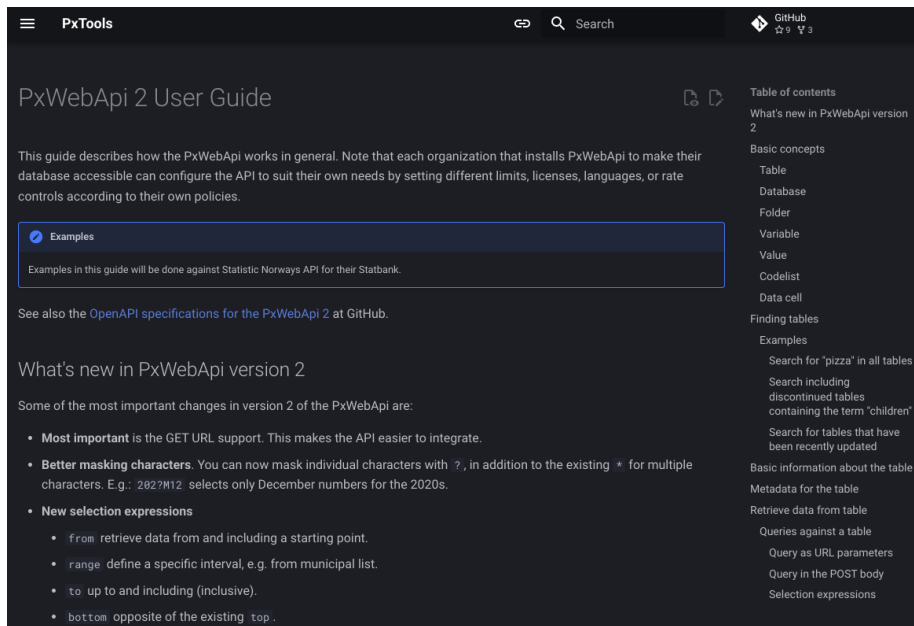
One Year Later



<https://github.com/PxTools/PxWebApi/graphs/contributors>

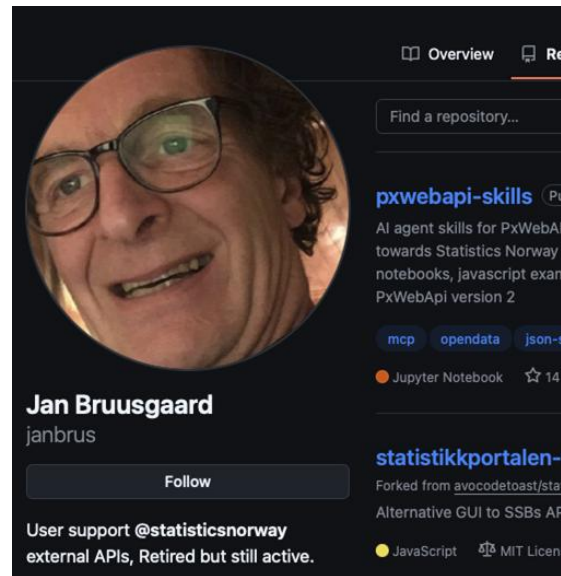
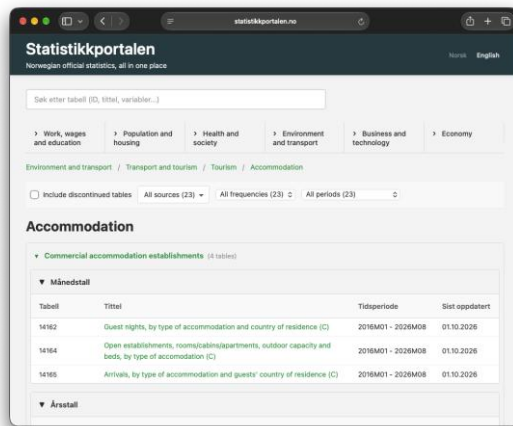
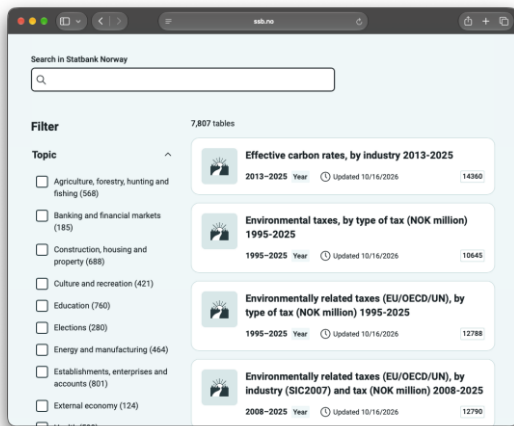
What Have We Learned?

- Architecture is stable
- API design works well
- No major redesign required
- Documentation is critical
- Adoption takes time



<https://www.pxtools.net/PxWebApi/documentation/user-guide/>

1003



Adoption Takes Time

- PxWeb Classic work well
- Limited development capacity
- Competing priorities
- Migration effort



<https://github.com/PxTools/sq-migrate>

<https://github.com/PxTools/PxApiConverter>

Looking Forward

- Stability
- Adoption
- Community
- Features

.NET 10 (coming soon)

- The framework we build and depend upon
- Upgrade to .NET 10
- We follow the Long Time Support (LTS) and .NET 8 reaches end of life

PxUtil based parser (coming soon)

- Workshop after the last PX meeting in Helsinki
- two additional sprints
- Some test are still missing
- Much better performance
- Opt-in feature

Bulk download (coming later)

- For users that wants the hole table
- Compliant with EC on High Value Datasets (HVD)
- File are created in
 - different formats
 - different language

Authentication (coming later)

- Force users to sign in (authentication)
 - Decide on protocol(s)
 - Should work in conjunction with PxWeb v2
- Restrict who can see what (authorization)
 - Your own custom logic

Thank You

