



TECHNICAL NOTE: windPRO Meteo API

Access meteo data from windPRO using bridge API

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1. Introduction

With windPRO 4.0, EMD has implemented a new feature that lets windPRO users access meteo data from the user organization's internal data stores, using a bridge/adaptor API. The API contract is defined by EMD for windPRO, while the API server is operated and hosted by the user organization.

Figure 1 shows an overview.

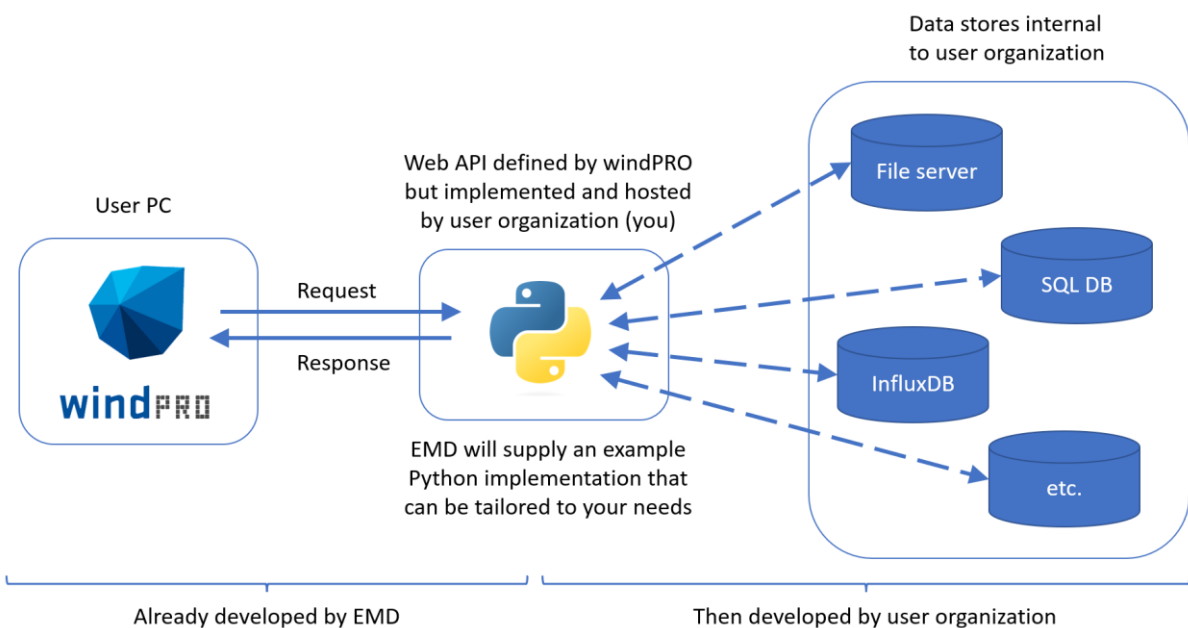


Figure 1 – Overview of the Meteo API architecture

Through the windPRO knowledgebase, EMD supplies an example Python implementation of the Meteo API that you can tailor to your needs. If you prefer to use another technology besides Python, the API is following the OpenAPI specification allowing you to implement the API by hand. The Meteo API is relatively simple in its current version 1.0 with only three endpoints.

Besides windPRO using the API, the user organization could also choose to make the API accessible from other clients, such as data science applications.

windPRO supports receiving different data formats through the Meteo API feature:

- Plaintext timeseries data (same as the windPRO Meteo "GO time series" function)
- windPRO meteo export (same as the windPRO Meteo "Import" function)
- windPRO .mesores (see documentation at the [windPRO knowledgebase - here](#))

Figure 2 shows a screenshot of adding a Meteo object and accessing the Meteo API feature.

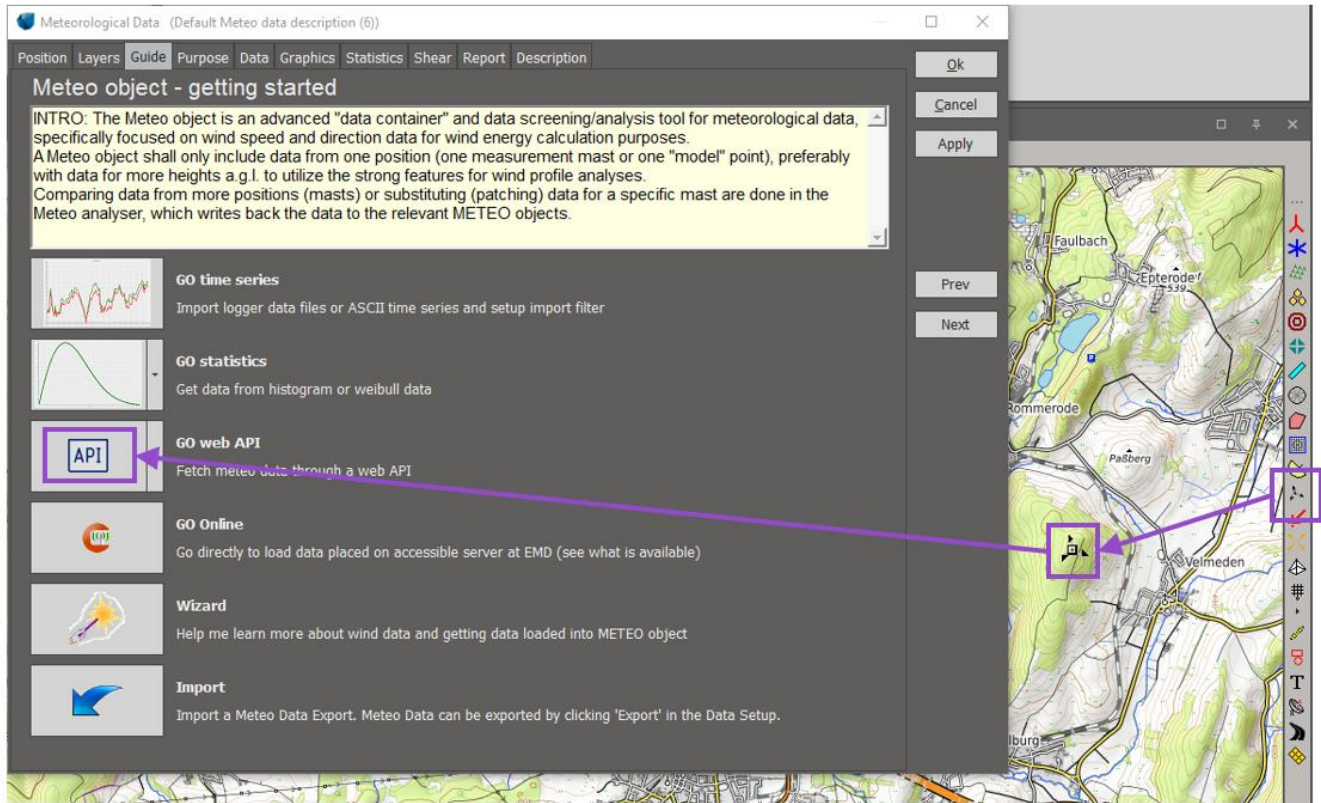


Figure 2 – How to access the Meteo API feature in windPRO

2. Security

Everything runs inside your own network, which also requires hosting your own web server.

windPRO authenticates against the API using HTTP BasicAuth. That means the API server should be hosted using HTTPS only, which requires a TLS certificate.

The API server can be programmed with fine-grained user roles and permissions, if relevant.

3. Versioning

The windPRO 4.0 supports version 1 of the windPRO Meteo API.

Future windPRO releases may add new features to the Meteo API, such as new metadata fields or server-side data filtering. If a new feature is compatible with the existing API version (e.g., a new optional metadata field), the API version will not be incremented. If the new feature is *not* backwards compatible, a new version of the Meteo API will be created. The user organization may choose to implement the new version if desired, but windPRO will remain backwards compatible with all versions of the Meteo API.