

WebLog Application Programming Interface (API)

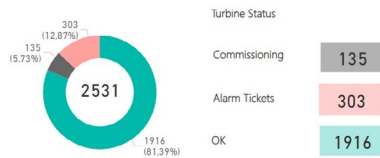
Condition Monitoring data can be visualized in many ways using the facilities within the WebLog Portal or WebLog Expert® software. However, customers may wish to interface directly to the data, information or knowledge held within WebLog, in order to apply some bespoke analyses.

For this an Application Programming Interface (API) has been created to allow customers to pull their own data from our server directly into their own applications.

There are four APIs:

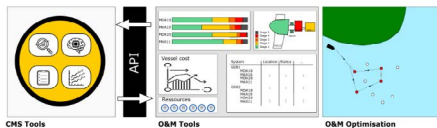
Ticket API

Beside the powerful WebLog Expert® software, which offers flexible reporting formats (Event Reports, Diagnosis Reports, Fleet Reports), an API provides access to all the Ticket information. The API can generate bespoke dashboards using tools like Microsoft Power BI.



Health API

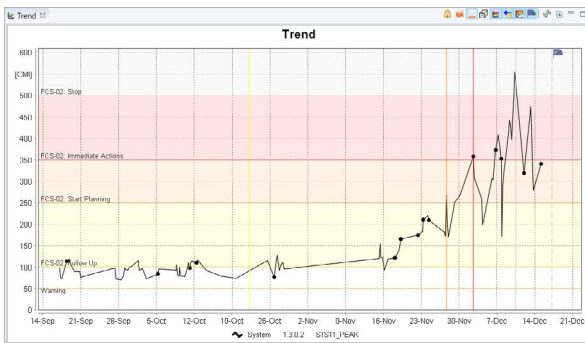
The WebLog Server calculates summary health indicators from the large number of characteristic values monitored on a turbine. Using the Health API, easy-to-use health information can be provided. By linking this health information to the “reference designation system for power plants” or RDS-PP - this solution supports standardization based on the affected subcomponent within the mechanical drive train. This can ease the collection of statistics through portability between wind turbine platforms.



Data API

For alternative analyses of raw data or integrating trends into customers’ own software or dashboards, a REST API is available for downloading raw data from the database.

With this interface the metadata of available raw data sets and the raw data files can be retrieved. Customers can effectively compare available data with what has already been downloaded in order to avoid unnecessary downloads.



Trend Data API

In addition to raw data, WebLog stores long term trends of Characteristic Value (CV) derived from the raw data through specified settings in the system. Customers may wish to import these trends for comparison with other influences on the plant, either seen in SCADA data or recorded in working logs. The REST API is also available for downloading trend data from the turbines, again with the metadata of available information to allow accurate and efficient retrieval.

In this way, customers can effectively compare trends with other available data sources, potentially using them as a feed for machine learning to assist with mitigation actions in future.

Implications and Limitations of API Usage

The APIs have been developed for the bespoke downloading of specific, limited extracts of data. Different solutions are more appropriate when a complete copy of the data for a fleet is required. This is better handled either through database replication or by duplicating the initial download.

For this reason, all the API downloads are subject to restrictions. Specific data packages can be negotiated, which accommodate API data requirements without overloading the databases.

Item	Item-No.	Description
API License – All APIs	00029914-00	License to use a defined combination of API capabilities, as agreed with your account manager
Trend API	00036089-00	License to use Trend API
Data API	00036090-00	License to use Data API
Ticket API	00036091-00	License to use Ticket API
Health API	00036092-00	License to use Health API
API Third Party Access Licence	00036093-00	License to allow third party users to access your data via an API
Data Packages for use with API	00036094-00	Data Packages defining the allowable limits for data downloads via your licensed APIs
Configuring User API rights	00036124-00	Service to configure user rights with the appropriate API access(es)