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# WebLog Interface

Integrated Condition Monitoring for Plants and Machines.





## Multiple Systems – One Challenge

Centralized Processing from Multiple Data Sources

Operators of large wind farm fleets are familiar with the problem: turbines from different manufacturers are equipped with different drive train Condition Monitoring Systems (CMS). Each requires its own expert software, data management and specially-trained data analysts who are familiar with the respective system.

WebLog Interface facilitates data post-processing into a single format. Data from different types of CMS can then be visualized by the same software solution.

Collecting data from a range of different sources, WebLog Interface then processes the data and stores the final results in a WebLog Server, where it then becomes available through the WebLog Portal and WebLog Expert<sup>®</sup>.

#### Standardized CMS from a Single Source

As existing Bachmann customers are already aware, the combination of WebLog Server, WebLog Portal and WebLog Expert<sup>®</sup> provides a complete drive train monitoring solution, offering

- Vibration and trend data visualization
- Ticketing system that provides plant-specific maintenance and event history
- Flexible API for data integration into customer solutions

Data can be used, for example, to generate fleet reports to indicate "Machine Health Status" or other individually configurable reports.



Through WebLog Interface, these advantages also become available for third-party systems. Import solutions for SKF WindCon CMS or Vibroweb XP Prüftechnik systems are already available with others in development. On our website you will find an up-to-date overview of all integrated systems.



Bachmann's holistic approach combines monitoring data from different types of CMS, enabling independent remote monitoring from a single source with the following advantages:

- Integration of third-party CMS data into the WebLog system landscape
- Clear presentation of multisystem CMS data from different sources
- Reduced complexity with standardized tools and monitoring processes

- Fast, error-free data interpretation through standardized reporting
- Data ownership remains with the customer, including full access to all measured variables at any time
- Bachmann remote monitoring and support based on many years of experience

#### **Features**

WebLog Interface software is designed to process data from third-party systems and send it to a WebLog Server.

- Applicable to all turbines with CMS
- All source data converted to WebLog data format
- Data automatically prepared and transfered to the WebLog Server database
- Order tracking generates precise measurement data from variable speed drives
- Fast Fourier Transformation (FFT) analysis applied
- Characteristic value calculation available
- Data hosting either at the customer or on Bachmann servers
- · Bachmann remote monitoring or hosting contracts can also be integrated

Alarms and values are calculated and processed in the same way as with current Bachmann systems. (In some cases there may be limitations in raw data acquisition from third-party systems).



V Data flow from 3rd Party CMS to WebLog Server.

The alarm-based monitoring processes embedded within WebLog Expert<sup>®</sup> provide a firm basis for predictive maintenance. Some of the new tools supporting Severity Classes and Failure Mode Symptoms Analysis provide even greater precision for maintenance planning, especially for offshore rotor bearing exchanges, where these tools have delivered excellent results.

Standardized data formating and ticket assignment within the WebLog application enables hardwareindependent, more efficient plant monitoring as well as simpler maintenance planning.



#### Use Case: Data Import for SKF CMS

Data import for SKF Condition Monitoring Systems (CMS) enables the automated integration of existing SKF CMS measurement data with a Bachmann WebLog Server. In this way, remote monitoring through SKF hardware can be implemented via existing Bachmann structures and processes. This enables condition monitoring and machine diagnostics with the full range of WebLog software tools, including all reporting as well as use of the ticketing system. Condition monitoring for plants equipped with SKF CMS will therefore function in exactly the same way as those equipped with Bachmann systems.



Measurement data collected by the SKF CMS is sent via an existing wind park router to a monitoring server, which forwards the data to a SKF database on an MSSQL server for temporary intermediate storage. Changes to the router configuration may be required if the communication routes and server infrastructure have changed.

From here, WebLog Interface will transfer selected data to a temporary WebLog file for further processing. Both the raw data and all derived calculations are subsequently stored on the WebLog Server in the same format as on Bachmann systems, where they will remain available for further analysis. Thanks to the WebLog Interface, the extensive condition monitoring functions of WebLog Portal and WebLog Expert<sup>®</sup> can be directly applied to non-Bachmann systems.

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