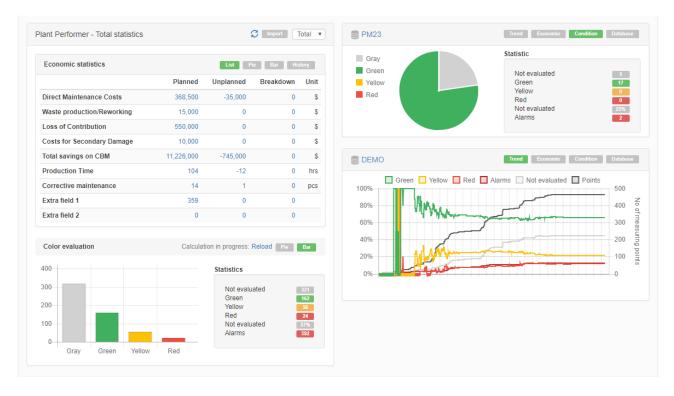
# Condmaster<sup>®</sup> Ruby 2019 Upgrade Benefits

The comprehensive diagnostic and analysis software Condmaster Ruby continues to evolve and offer new features enabling companies to take advantage of their condition monitoring data to gain key insights and optimize processes. The new release arrives with significant database performance improvements, a new and enhanced KPI statistics module, and extended connectivity features for smart manufacturing and Industry 4.0 environments.

## Connectivity and follow-up for the smart factory

• *Plant Performer*: A key feature of the new software release is the Plant Performer statistics module, which has undergone extensive further development. Plant Performer compiles and visualizes statistics relating to technical and economic KPIs in the OEE/TEEP area for display, evaluation, and printing. The module is a very useful tool to demonstrate the benefits of condition monitoring and communicate its technical and economic impact to all levels of the organization. Plant Performer data can be exported to other systems by means of an application programming interface (API). Statistics from an unlimited number of Condmaster databases can be exported and imported – such as from other divisions, production units, plants, or an entire group – for easy comparison of data.



• *REST API:* The IIoT and Industry 4.0 are all about connectivity. Adding REST API and OPC UA<sup>\*)</sup> support, the new version of Condmaster takes another step to facilitate interoperability between automation assets in smart factories. REST API is a web-based service enabling Condmaster to act as a hub for condition monitoring data, allowing other resources, systems or devices to access Condmaster data for further processing or analysis.



\*) to be released in Condmaster Ruby 2019.2.1

- Database performance enhancements: The new release arrives with a number of performance optimizations to meet the demands for faster and more efficient handling of rapidly increasing data volumes. An even greater degree of parallel computing enables faster execution of processes and calculations, thus supporting **Big Data** analytics. For example, the calculation of all machine fault symptoms in a large database is now typically about ten times faster; a full backup of a 2 GB database typically four times faster; and reloading said database about seven times faster. Enhancements include:
  - Updated backup management
  - Faster database synchronization with reinforced data integrity
  - Backup options now include incremental and differential backups of measurement results
- Condmaster Entity Server now includes a new module for display, evaluation, and printing of Plant Performer statistics. It now also supports data exchange via Rest API, as well as TLS (Transport Layer Security), a cryptographic communication protocol allowing the secure transfer of encrypted information between computer systems over web connections.
- Vectorized graphics: Originally introduced in Condmaster Ruby 2018.2.2 and now enhanced, the new release supports the use of graphics in .svg format; a major time saving feature that radically facilitates the definition of color zones in the Graphical Overview. Further advantages of vector graphics are the ability to rescale the image to any size without loss of quality, and the significantly smaller file size.
- *Touch interface:* The new Condmaster release is touch compatible and can be run on touch-enabled desktops, tablets, and laptops under the Windows operating system.
- New sophisticated report functionality makes it possible for advanced users to design reports according to personal preferences by creating and customizing scripts that generate the desired output. To use *Customized Reports*, basic programming skills are required.
- Support for vibration transducers with integrated temperature measurement: The new SLD144B-M8/UNF-T transducer generates a signal which is extracted and converted into a temperature reading in Condmaster.
- Route-based measurement intervals can now be created based on machine operating time.
- Numerous minor performance optimizations, e.g. in software language management.



### How to upgrade

The upgrade process is straightforward. Condmaster Ruby 2019 Edition is backwards compatible and users of Condmaster Ruby 2018 or earlier versions install a single user or network version of Condmaster Ruby 2019 Edition, then transfer the contents of the old Condmaster database using a safety copy of that database.

### Minimum system requirements

1 GB of RAM memory

- Windows 7 or later
- 1 GHz 32-bit (x86) or 64 bit (x64) processor
- 15 GB free disc space
- Microsoft SQL Server 2016 or later
- (see the Condmaster Ruby installation manual for more information)

**Note:** Microsoft SQL Server 2016 requires Windows 8 (64 bit) or later with at least 1.4 GHz CPU. Condmaster Entity Server (CES) requires 64 bit Windows. LinX (handling online systems) and CES (handling online systems, API, and Plant Performer statistics) require higher data performance.

For more information and recommended system requirements, see the Condmaster Ruby Installation and system administration manual, document no. 72208, and spminstrument.com/products/condmaster/.

