

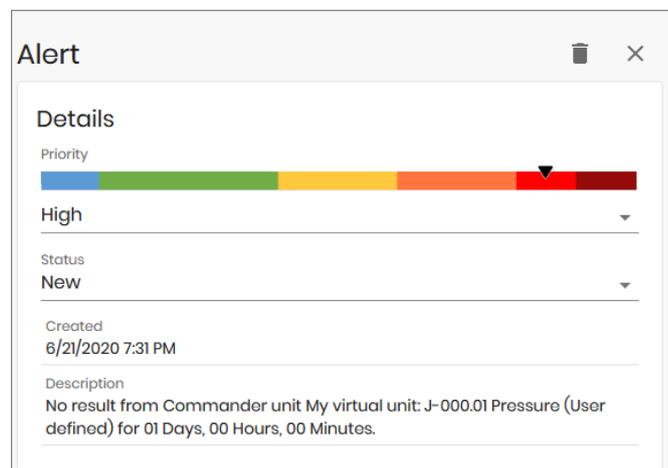
Condmaster[®] 2022 RUBY

UPGRADE BENEFITS

The new version of the comprehensive analysis and diagnostic software Condmaster Ruby introduces a range of new and improved functionality. With the new release, this feature-rich software continues to develop towards AI and machine learning, adding new powerful and expanded functionality to save time and increase the accuracy of condition assessments. A host of customer-requested enhancements are also included to further improve user experience and efficiency.

Overview of key upgrade benefits

- **New alarm handling:** To better support maintenance teams in their daily work, the Condmaster alarm handling has undergone a complete redesign. In this process, the previous Alarm functionality has been renamed to **Alerts**, a name that better reflects its new capabilities and broader scope. This key element in the software is now more versatile and offers far more possibilities for a flexible workflow and efficient management of maintenance tasks when equipment condition and criticality rating calls for action, such as setting priority levels and status indications on individual alerts. The possibility to view spectrums and graphs alongside the **Alerts** window and trace events on individual alerts are further examples of new and highly useful features.



Tighter integration to the Condmaster analysis features now makes machine health predictions an integral part of the **Alerts** function.

Priority levels, shown as intuitive color gradients, run from blue (informational; no immediate action required) to dark red (critical; requires immediate attention).

In correspondence with typical incident management platforms and work order systems, it is now possible to work with different status modes:

- *New*: unhandled alert
 - *Open*: acknowledged alert
 - *Closed*: handled alert
 - *Deleted*: deleted alert
 - *Snoozed*: paused and hidden alert (for some period of time).
- The **Decision Support System** is a very powerful aid for staying on top of asset operating condition without the need for data analysis expertise. This reliable tool – the basis of which is the automated analysis of measurement data – makes maintenance departments less reliant on in-house analytical skills and enables teams to more confidently determine where to direct maintenance efforts and develop more effective maintenance routines. The following standalone functions – all part of the Condmaster Ruby platform – form DSS:



- **Machine Builder***) contains the knowledge base derived from the expertise of experienced condition monitoring practitioners. It provides a graphical drag-and-drop interface to create complete machines from components, and automatically obtain all measurement assignment settings.
- **Signal Quality Test***), a background process that continuously checks for ski slopes and bias problems. The function can also identify issues with faulty or incorrectly connected sensors. The main purpose is to determine whether the signal is of good quality or if there are deviations that merit further investigation.
- **Machine Baselines** determine normal machine behavior using performance data and criticality ratings for individual machines. The machine baseline data, collected during a learning phase, can be used to automatically calculate deviations and raise alerts for machine fault symptoms and condition parameters.
- **Health scores** are calculated by applying mathematical algorithms to collected baseline data for individual machines. The health score is presented as basic color evaluations in green-yellow-red or as color gradients for a more detailed evaluation. The gradient health score corresponds to a normalized floating-point value from 0 to 1, where 0.2 – visualized in green – represents the normal condition of the machine baseline.
- **Alerts**; as described under “New alarm handling” above.
- **Entity rules***) has been further developed since its original launch in Condmaster Ruby 2020 and is now even more flexible. This powerful function is used to expand and customize Condmaster Ruby with customer-unique, event-driven functions and create custom integrations with other IIoT systems.

- **Support for new products** in the SPM ecosystem of condition monitoring products: the new Intellinova Parallel EN version with four channels and the Airius wireless vibration sensor with LTE-M communication are fully supported in Condmaster Ruby 2022.
- **Customer-driven enhancements:** In keeping with the SPM tradition of working closely with users, Condmaster Ruby 2022 incorporates a substantial number of customer-requested enhancements such as simplified configuration of Airius sensors and measurement assignments, extension of the CES API, and much more.
- **Condmaster Ruby Airius Edition** is a special software version dedicated to the exclusive use of Airius wireless vibration sensors; ideal for plants just getting started with condition monitoring.



*) first launched in Condmaster Ruby 2020

How to upgrade

The upgrade process is straightforward. Condmaster Ruby 2022 is backwards compatible and users of the 2020 or earlier versions install the new software, then transfer the contents of the existing Condmaster database using a safety copy. Users can easily import CES settings from earlier versions into CES 2022 (settings included are CES Service settings, CES Admin Portal settings, OPC certificates, other certificates, and Airius battery level settings).

Minimum system requirements

- Windows 8 or later
- 1 GHz 32-bit (x86) or 64-bit (x64) processor
- 1 GB of RAM memory
- 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 the Intellinova Standard and Intellinova Compact online systems) and CES require higher data performance than those specified above.

For more information and recommended system requirements, see the Condmaster Ruby Installation and system administration manual, document no. 72301, and spminstrument.com/products/condmaster/.

