SCHAEFFLER OPTIME RELEASE NOTE

OPTIME Release 4 – Product Increment 3

14.11.2022

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Background

This OPTIME Release is a major release that brings update to several Schaeffler OPTIME components, these components are OPTIME backend, OPTIME mobile apps (Android and iPhone) and OPTIME dashboard. With this release there are also new firmware versions available and supported for OPTIME gateway, sensors and lubricators.

With this release we bring several performance improvement and fully new functionalities based also on customer feedback, with these functionalities we believe end users of OPTIME will have even better user experience and benefit from OPTIME.

 Key changes to the OPTIME components and new functionalities are described in this release note.

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1   NEW FEATURES – SOFTWARE (OPTIME Dashboard and Mobile)

1.1   Generic improvements

Like with all OPTIME releases, beyond items listed in this document this release brings several smaller improvements related to OPTIME Mobile App + Dashboard and OPTIME C1 Smart Lubricator provisioning and functionalities. These include visible usability improvements and technical improvements on the OPTIME solution backend.

You can get more detailed information about the release from Schaeffler experts.

1.2   OPTIME dashboard improvements

- To make controlling the OPTIME learning modes easier we have introduced the possibility to trigger the sensors learning period also via a button on the OPTIME dashboard.
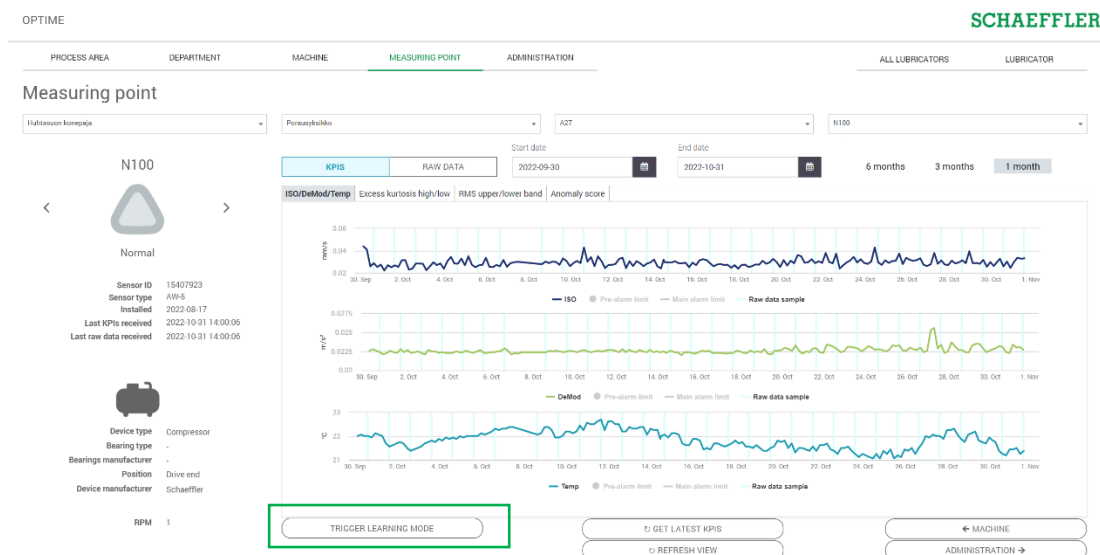
- With this release we have done further integration between OPTIME and Schaeffler Prolink devices. With this release OPTIME shows the alarms as they have been configured on the Prolink device, this gives the user more details to decide for their actions based on the alarms.

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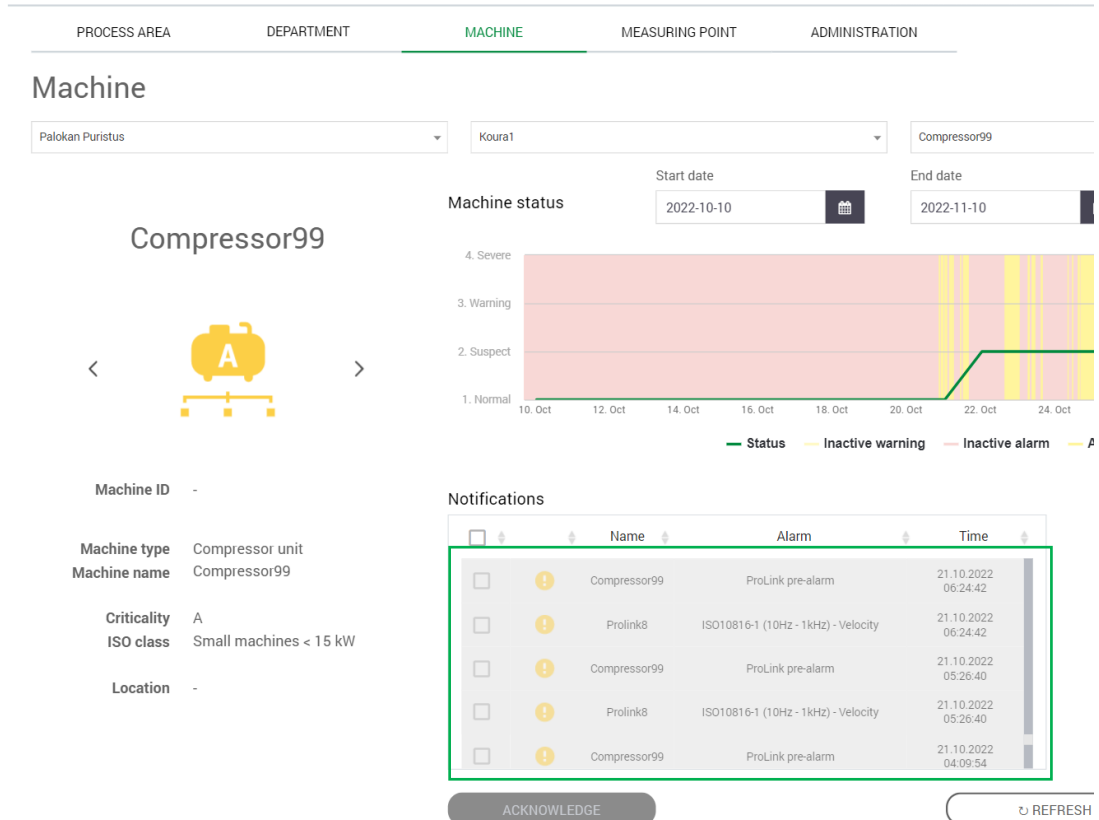
- With this release we have unified all different view/action buttons on measuring point level into one group and now the user may to go back to "Machine" dashboard with "MACHINE" button. The user may refresh the KPI data with the "REFRESH VIEW" button. It is also possible to request new KPI data from the sensor on demand with the "GET LATEST KPIS" button. The user may also access the site admin dashboard to view sensor statuses and network topology using "ADMINISTRATION" button.

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- OPTIME C1 fill level visualisation has been modified with this release. Now in the centre there is the fill level visualization with the fill percentage of the cartridge and coloring related to filling level pre alarms (yellow) and main alarms (red). There is also information of the lubricator hardware latest operating status, battery status, gas release setting used, lubricant quantity and lubricant quantity time span, last filling date and the estimate about days left until empty.
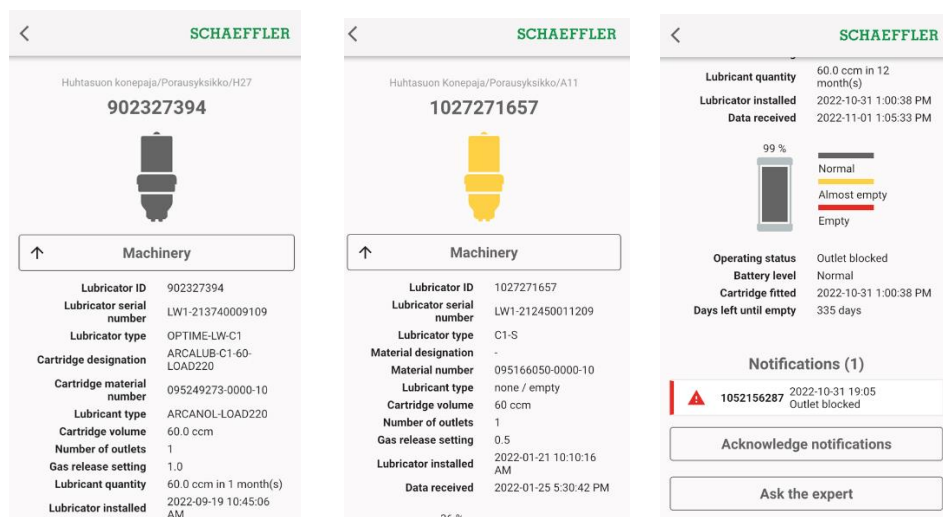
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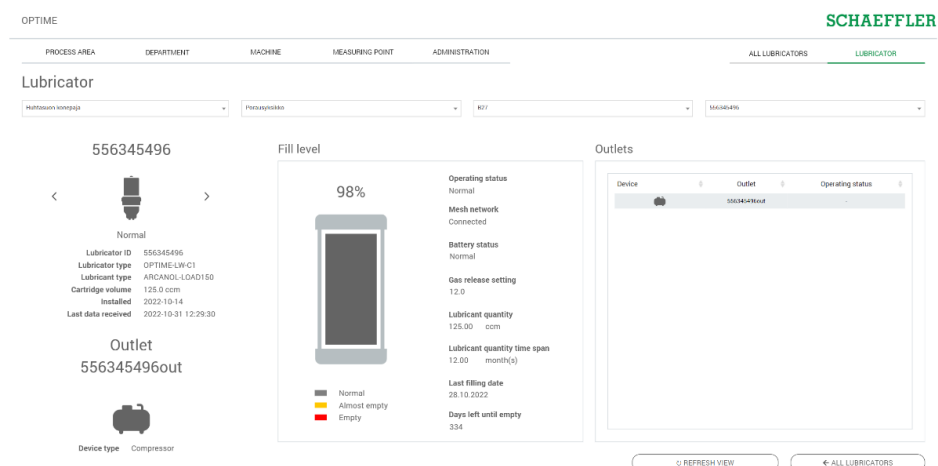
- In the OPTIME admin dashboard you now have on the lower part for the connection and operation statuses there are different tabs for OPTIME sensors and OPTIME C1 lubricators. Also, the number of provisioned sensors or lubricators is available here for reference.
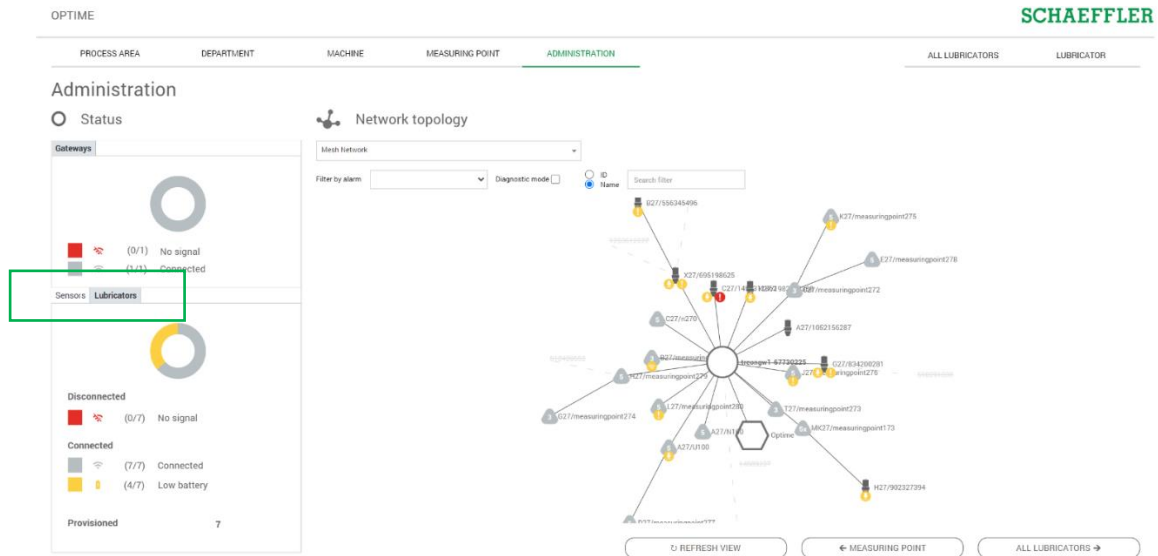

1.3 OPTIME mobile improvements

This release introduces several improvements and additions into OPTIME C1 smart lubricator operations with OPTIME app. Below you find information on the most visible and important changes:

- The user is shown additional lubricators data including IDs, serial numbers, lubricator type as well as information of the installed lubricant cartridge like lubricant type, cartridge volume and manually set gas release setting for the gas charge on top of the cartridge. The exact lubrication dispense setting is shown as lubricant quantity in a certain time interval. The icon color shows the alarms status for the lubricator.
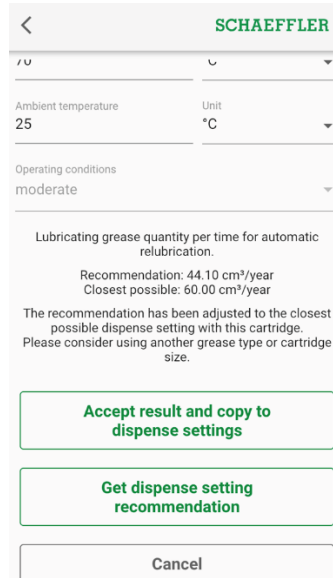
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- With this release while editing the dispense settings or installing a totally new cartridge, the user is also able to request help for the dispense setting and get recommendation from the integrated Schaeffler GreaseApp service. Instead of manually inputting the known dispense settings, the user may press button "Get dispense setting recommendation" to start getting a recommendation.
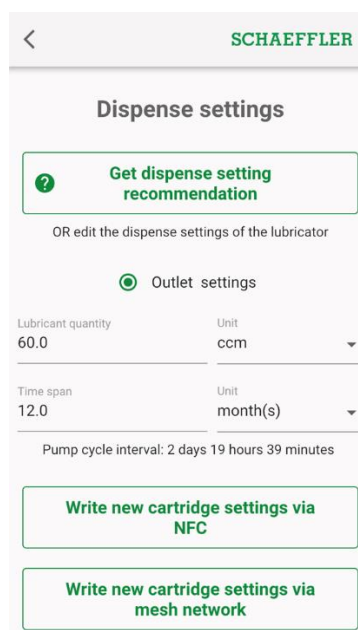
The most important information to get the dispense setting recommendation is the bearing designation information. At the moment recommendations from the GreaseApp only work for Schaeffler bearings and Schaeffler greases. This is indicated to the user when using the dispense setting help. User needs to select the bearing to be used for the recommendation with either of the two top-most options in the view
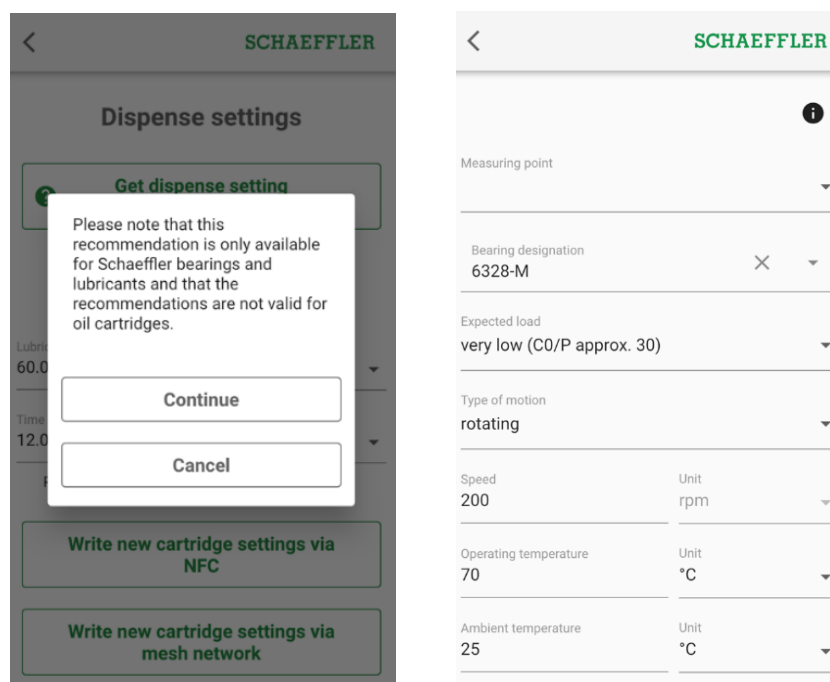

Once the recommendation is shown, the user may accept it with button "Accept result and copy to dispense settings". Then the user may continue writing the changed settings via NFC or mesh network to the lubricator. The recommendation parameter query settings are stored for the next time when recommendations are requested for this specific lubricator.

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- Instead of QR/DMC code scanning, the user is now also able to select manually an option for a 60 ccm or 125 ccm non-Schaeffler cartridge, when an applicable QR code is not available, but the cartridge is otherwise compliant for the OPTIME C1 lubricator. These may be cartridges from other technologically compatible vendors or Schaeffler cartridges if the QR / DMC code has been damaged beyond capability to read it. The different options may be selected from the drop-down.

- With this release with OPTIME C1 the user may also replace the lubricator cartridge when it is empty by using the "Replace lubricant cartridge" button in the "Installation" status button in the lubricator view. The user may then use the "SCAN QR CODE" button to activate the mobile's camera and to scan the QR or DMC code of the lubricant cartridge to be installed. With this release instead of QR/DMC code scanning, the user is also able to select manually an option for a 60 ccm or 125 ccm non-Schaeffler cartridge, when an applicable QR code is not available, but the cartridge is otherwise compliant for the OPTIME C1 lubricator. These may be cartridges from other technologically compatible vendors or Schaeffler cartridges if the QR / DMC code has been damaged beyond capability to read it.

  The different options may be selected from the drop-down.
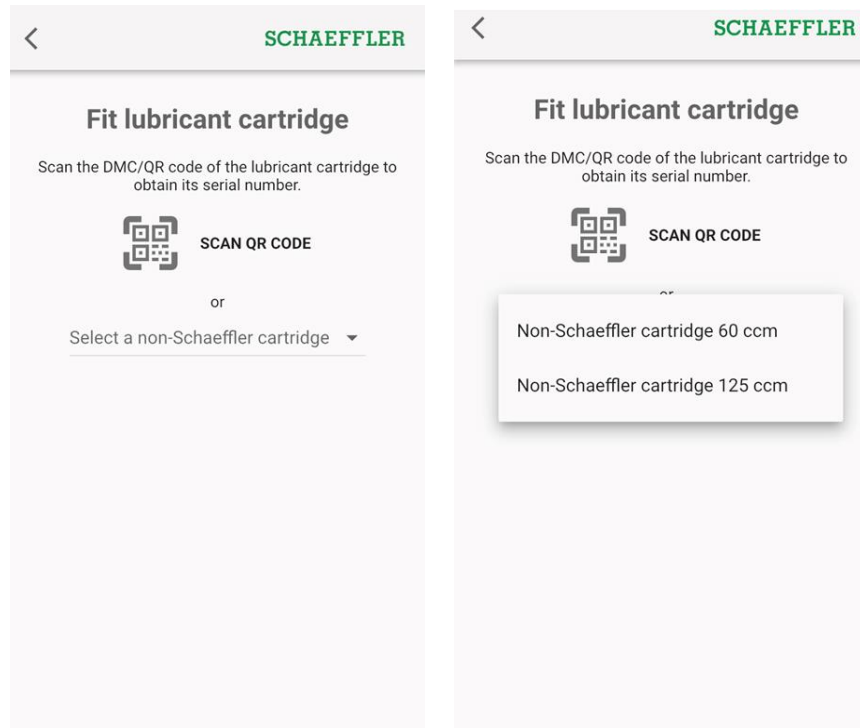
2 NEW FEATURES – OPTIME API

2.1 OPTIME API improvements

With this release we are bringing additional functionalities to our OPTIME commercial API to serve better customers who are using OPTIME data further via integrations. These additions include

New features:

- Schema: LubricatorInfo
    - add properties: lubricantType, materialDesignation, outletAverageCurrents
    - property outletStatus deprecated
    - make daysUntilEmpty and temp nullable
- Schema: SensorInfo
    - add properties: sensorMeasurementMode and nonContinuousModeInfo

- Schema: LubricatorStatus
    - add a new value to enum: Low running voltage
- Schema: VibrationData
    - add property: dcOffset
- Endpoint: Assets
    - new endpoint added that can be used to fetch organization/asset tree as a flat list
- Endpoint: Alarms and Alarms/{id}
    - two new endpoints added that can be used to fetch alarms

Documentation changes:

- Endpoint: alert-ack-options
    - the required flag to query parameter lang. This change does not break the earlier implementations because the endpoint still works without this parameter but returns "raw" descriptions that are not proper English. Nothing has been changed on the backend side.
- Endpoint: /measuring_point/{id}/vibration_data
    - Add required flag for query parameter axis and also change the type from string to string enum. This is the bug fix of documentation and nothing has been change in the service side.

Further details on the API and changes in this release can be found from the OPTIME Commercial API documentation.

3   OPTIME SOLUTION CURRENT VERSIONS

Current solution components with this OPTIME release are:

Component	Version
OPTIME Android mobile app	1.9.0
OPTIME Apple app	1.9.0
OPTIME dashboard	2.1.54
OPTIME gateway app	1.1.10
OPTIME sensor	1.2.2
OPTIME C1 lubricator	1.4.0