Trakka 4.6 Release Notes

Revision Date: January 18, 2019
PDF File Version: v01

This document summarizes the changes to Trakka in Version 4.6

Click links in the following table for details about product changes:

Section	Summary
Predictive Analytics	Hourly averages of sensor data now available in Trends and results as output of anomaly detection algorithms
Predictive Analytics	Anomaly Detection model outputs now displayed in Trends
Product Branding	Customer/Partner logos displayed in application and on reports
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Predictive Analytics

Hourly Averages displayed in Results and Trends

Trakka users who are providing high frequency equipment sensor data, can now see hourly averages of this data in Trakka, if they are using the Predictive Analytics feature. Dingo's machine learning algorithms can now ingest and process the raw data and provide aggregated hourly averages for display on Trends and in the Results tab.

If using the Predictive Analytics features and providing Trakka with high frequency equipment sensor data, the hourly averages are available as follows;

1. In the Results tab, the hourly Observations are stored as a non-reviewable Observation (Observation type = Automated Onboard). This means they appear, just like a normal observation, but don't pass through the normal Review process nor land in the Unreviewed Inbox. These observations pass straight through to history, so they can be viewed, as required, in the Results tab. To see this data, choose the Automated Onboard observation type in the filter (as per below). This will only be available if you are using the Predictive Analytics feature.

2. In the Trends tab, these Observations/Indicators can be displayed, the same as any other Indicator in Trakka. To add these values to a Trend, simply go to Configure Views from the Trends tab and add these Indicators to the Trend view.

Anomaly Detection outputs displayed in Trends

Dingo has spent the last 12 months developing and refining Machine Learning models to detect anomalies in condition monitoring data. These models highlight anomalous behavior in the data and the outputs of these models are now embedded in the Trends of Trakka. Customers providing high frequency equipment data, who have access to the Predictive Analytics features, can now see these anomalies highlighted in the Trends.

Anomalies appear as red markers on the trendline as per below. They indicate that the value for that indicator was considered anomalous by the machine learning algorithms processing the data. The value was unexpected given the recent history of results for that indicator
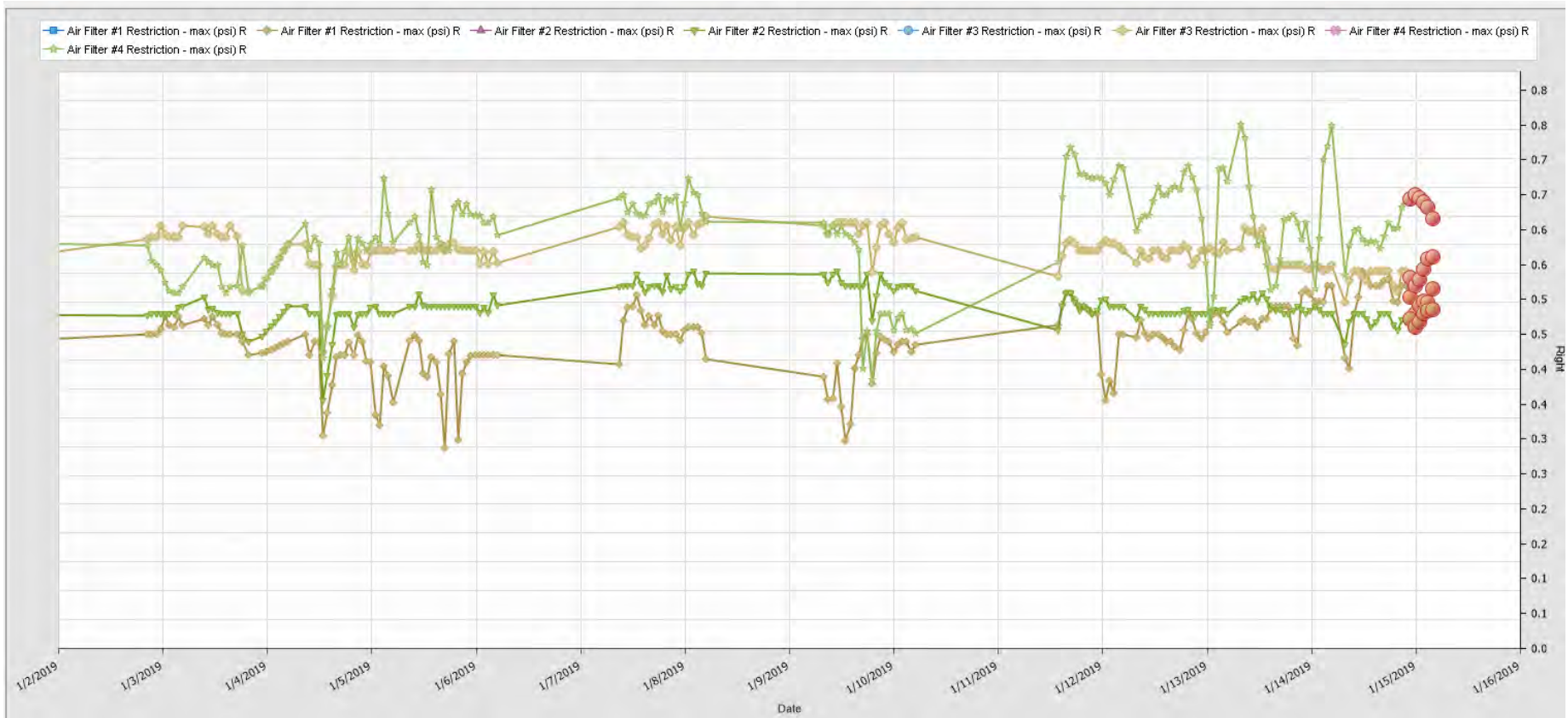
By using the crosshair feature on the Trends, it is possible to see more information about the anomaly. The crosshair dialog box, shows information about the Indicator, date/time of the measurement, the value of the measurement and the Anomaly Percentile. The Anomaly Percentile indicates the Percentile rank of the anomaly score for that indicator value. Contact Dingo for a more detailed explanation of the anomaly scores and percentiles
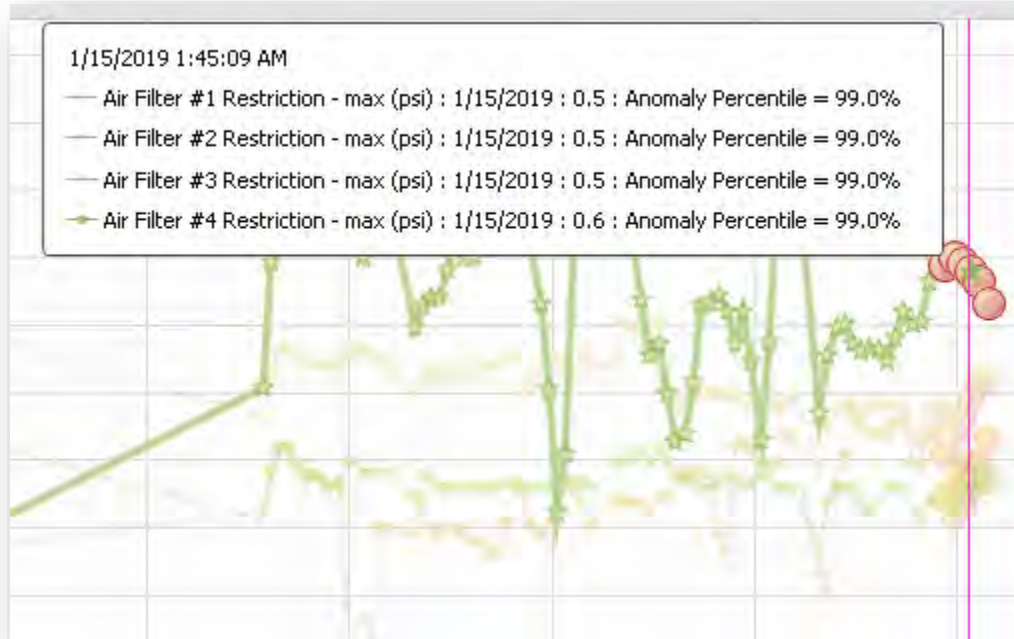
In coming releases of Trakka, these anomaly scores, anomaly percentiles and other outputs of the machine learning algorithms will be made available in other areas of Trakka to help with data analysis and spot emerging issues.

Product Branding

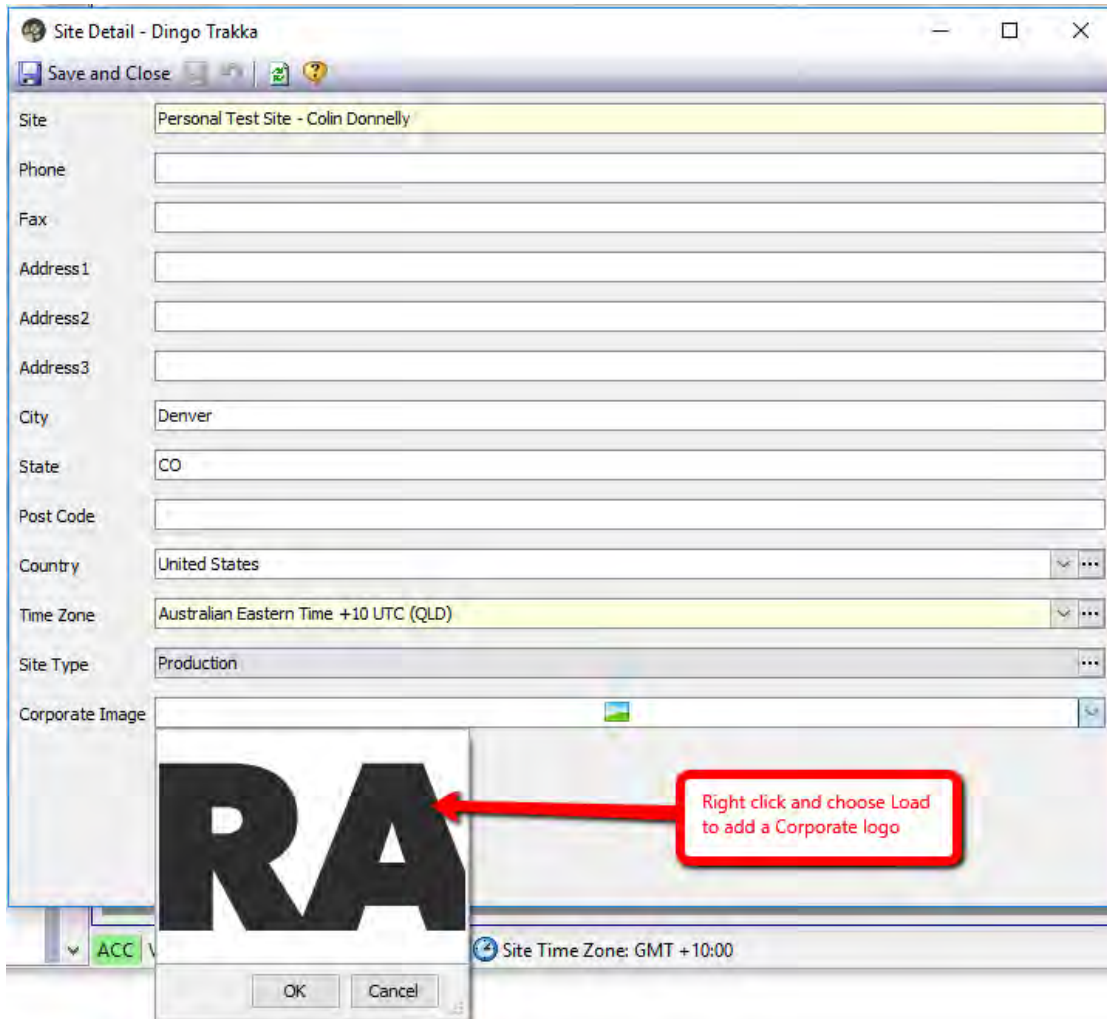## Customer/Partner Logos on Trakka screens

Customers and Partners can now load a corporate logo into Trakka, for display on the main menu bar and in all Trakka reports. This new capability allows both Customers and Partners to 'brand" the Trakka product with their logo

If a Corporate logo is added in Tools > Site Details and it will be displayed in the Menu bar as per below (where Trakka logo is)

To load a logo, go to Tools > Site Details and access the Corporate Image field. From the dropdown, right click inside the image field and choose Load. The logo will be automatically scaled to fit within the logo region.

Customer/Partner Logos on Trakka Reports

Customers and Partners can also display their corporate logo on Trakka reports. Once a Corporate Image is added into Site Details, it will display on the reports as per below;
.
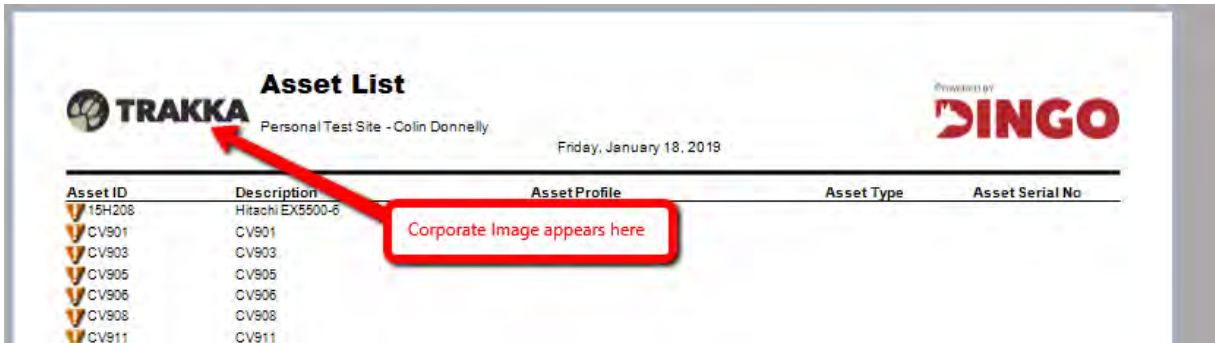
Review Emails

Observation Attachments can now be included in Review emails

It is now possible to include Observation attachments when sending Review emails from Trakka. Site preferences are available to set local email server size limits, allowing data analysts to include reference documents on the review emails, providing planners, engineers and technicians with valuable information to complete their tasks

To include Observation attachments on a Review email, follow the steps below;

1. Open the Email condition Review detail form as usual. This is normally accessed from the "Save and Email" button on the Review detail form
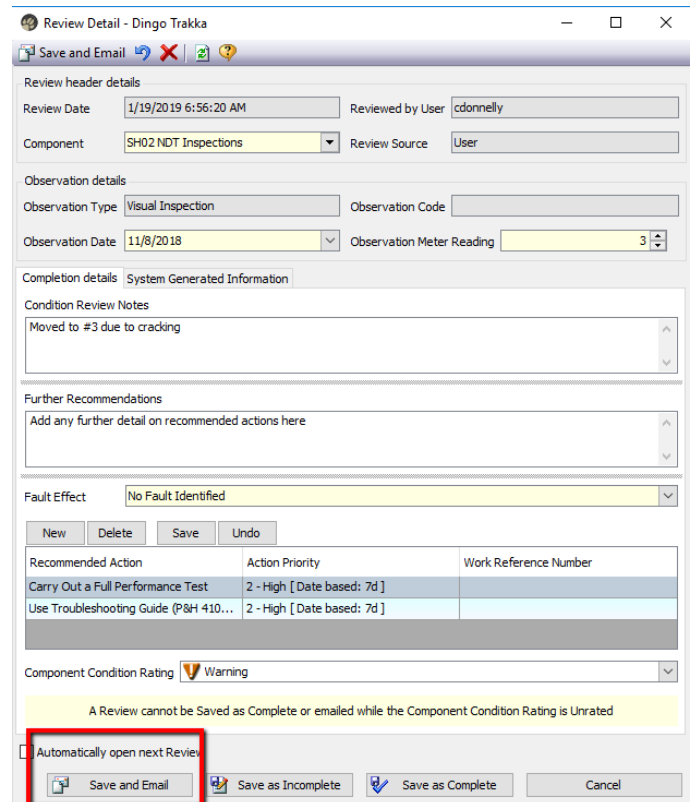
2. Under the new Observation attachments section, is a list of all attachments for the current observation being reviewed. Using the checkbox, select or unselect which Observation attachments you want to include in the email.

3. In the bottom right corner of the form, is a gauge estimating the size of the composed email, compared to the maximum email size limit (see later for description on how this is determined)

4. Be sure to keep the total size of the email, under the Limit shown, otherwise it is possible the email will not reach the intended recipients.
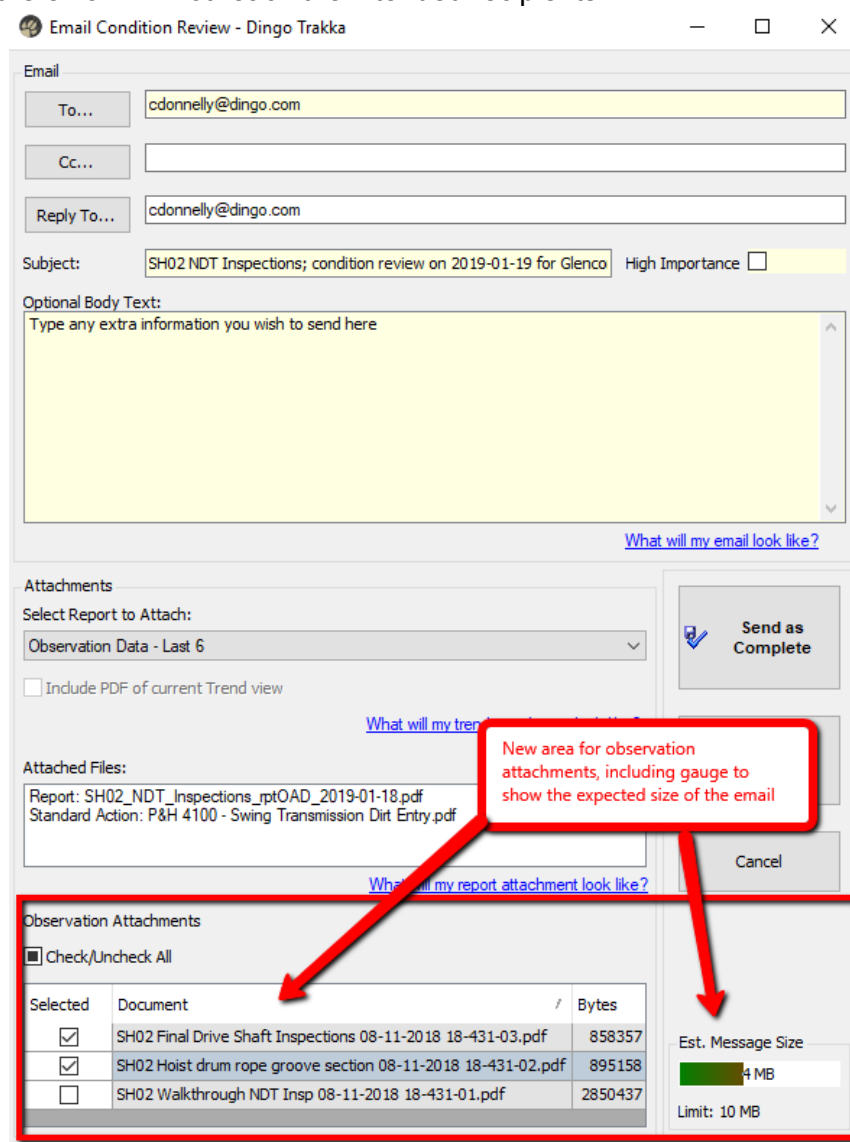

5. The message size is calculated using the following logic, as the final size is not determined until the email is sent from the Trakka server.
   a. Total sum of the sizes of all Observation attachments. The size of each document is displayed in bytes
   b. Add the size of any documents attached to standard actions. These are displayed in the Attached files section.
   c. If a Report is attached, 600KB is added to the size of the email
   d. If a Trend PDF is selected, 400KB is added to the size of the email
   e. 100KB is added for the message body and email headers.

6. If the email exceeds this limit, a warning message is displayed, before Trakka attempts to send the email.
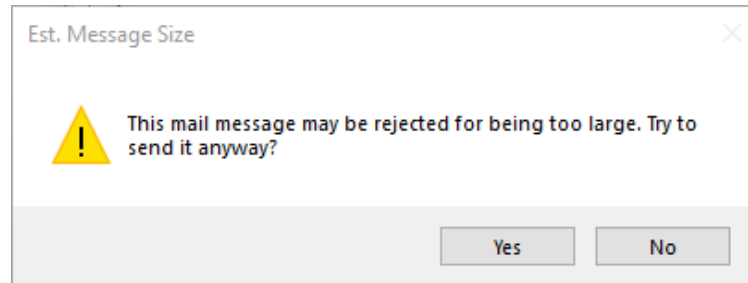
Setting the email server limit

By default the email message size limit for each customer is set at 10MB. This value can be changed in Tools > Preferences as per below. Be sure to check with your IT staff before changing this limit, to prevent emails being too large for your server.
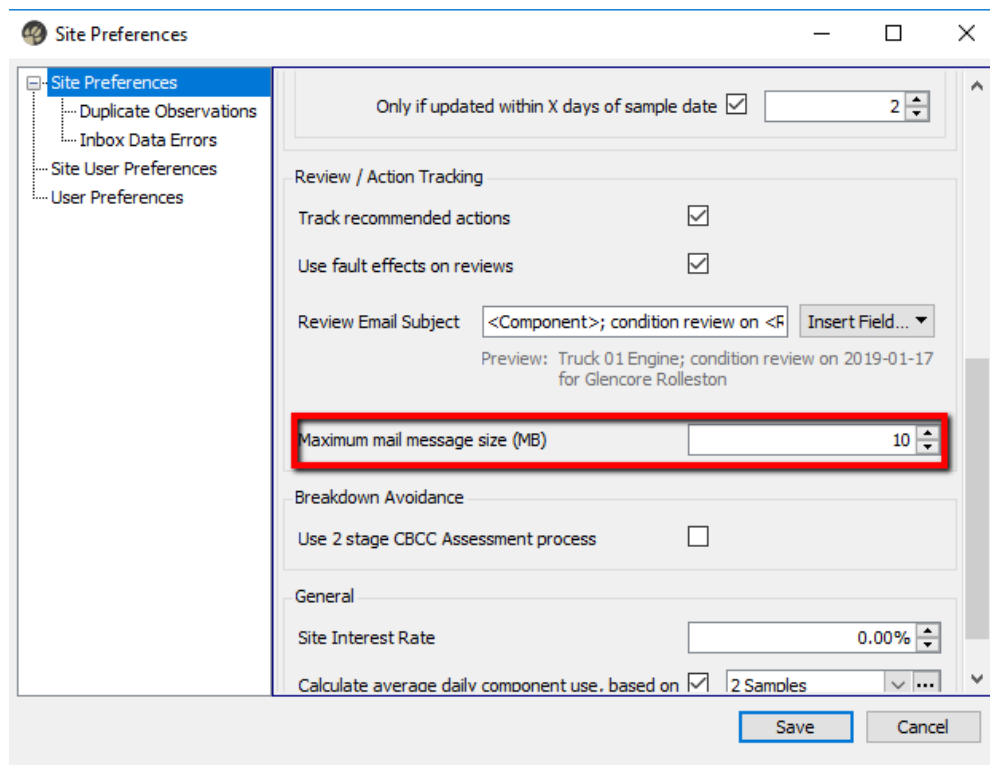
Sample Labels

New Simplified Label

Trakka now has a new simpler sample label form. It can be found in the list of sample label formats as "Short Form Dymo 30323 Shipping Label. This label was created in conjunction with several customers to provide the minimum information needed by the lab and ensuring long asset/component IDs could be shown in full

This label prints on the same DYMO labels, as some of the existing labels

Bug Fixes

Trends Module

Several bug fixes have been made to the Trends module of Trakka, to address the following known issues;

1. Added padding to the right side of the chart, to stop recent event lines, documents and inspections from not appearing
2. Modified the background calculations to provide more responsiveness when switching between X-axis scaling options