

# Trakka 4.1.0 Release Notes

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This document summarizes the changes to Trakka in Version 4.1.0.

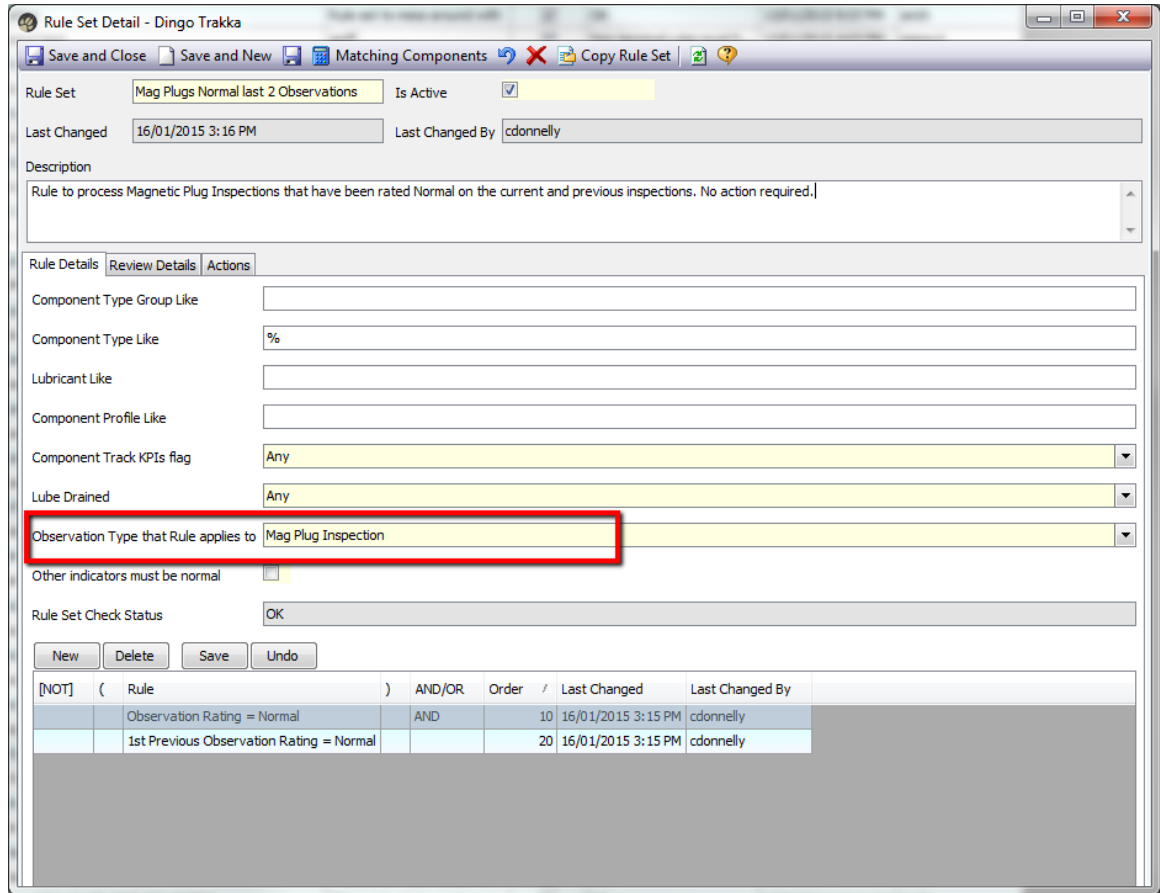
Click links in the following table for details about product changes:

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## Condition Intelligence Module

### Added Observation Type Designation

Trakka 4.1.0 includes the new option to designate the Observation Type that a Rule Set applies to in the Condition Intelligence Module. This allows Rules to be setup that are specific to a certain Observation Type. For example a different rule can now be setup to process Magnetic Plug Inspections that doesn't apply to Fluid Analysis samples. The Observation Type will default to Fluid Analysis for all new Rule Sets and should be edited as required when creating new Rules.



The Indicators available in the Rule Expression area are not limited by this Observation Type but the Rule Set Check Status field will indicate if an invalid Indicator has been used in the Rule Set.

## New “Other Indicators Must be Normal” Option

A new checkbox has been added to the Rule Detail form to aid in rule construction. The checkbox titled “Other Indicators Must be Normal” is turned OFF by default. When turned ON it adds another clause to the Rule stating that outside of the Indicators listed in the Rules below, all other Indicators must be either Normal, Unrated (no alerts set) or not tested (no value). So in the example below the Rule will trigger if only the Particle Count indicators listed are = Warning but all other possible Indicators resolve to be “Normal” as described above. If anything else was = Warning or Critical this Rule would not trigger.

This function would be effective when constructing rules that process Observations where only one or a few Indicators could be abnormal but without other issues, no corrective actions would be necessary such as the example below.

Rule Set: Part Cnt = Warning all else Normal test2

Last Changed: 16/01/2015 12:46 PM

Description: Process observations where any Partide Count indicator is Warning but all other Indicators are Normal.

Other indicators must be normal:

[NOT]	(	Rule	)	AND/OR	Order	Last Changed	Last Changed By
	(	ISO 4406:1999 > 04µ (value) = Warning	)	OR	10	16/01/2015 11:38 AM	cdonnelly
		ISO 4406:1999 > 06µ (value) = Warning	)	OR	20	16/01/2015 11:38 AM	cdonnelly
		ISO 4406:1999 > 14µ (value) = Warning	)	OR	30	16/01/2015 11:38 AM	cdonnelly
		Partide Count > 4µ (/ml) = Warning	)	OR	40	16/01/2015 11:38 AM	cdonnelly
		Partide Count > 6µ (/ml) = Warning	)	OR	50	16/01/2015 11:38 AM	cdonnelly
		Partide Count > 14µ (/ml) = Warning	)	OR	60	16/01/2015 11:38 AM	cdonnelly
		Partide Count > 21µ (/ml) = Warning	)	OR	70	16/01/2015 11:38 AM	cdonnelly
		Partide Count > 38µ (/ml) = Warning	)	OR	80	16/01/2015 11:38 AM	cdonnelly
		Partide Count > 70µ (/ml) = Warning	)	OR	90	16/01/2015 11:38 AM	cdonnelly
		Total Partides (/ml) = Warning	)	AND	100	16/01/2015 11:38 AM	cdonnelly

Rule Set Expression: Part Cnt = Warning all else Normal test2

Matching profile: Component Profile matches "%"

Rule expression: ( ISO 4406:1999 > 04µ (value) = Warning OR ISO 4406:1999 > 06µ (value) = Warning OR ISO 4406:1999 > 14µ (value) = Warning OR Partide Count > 4µ (/ml) = Warning OR Partide Count > 6µ (/ml) = Warning OR Partide Count > 14µ (/ml) = Warning OR Partide Count > 21µ (/ml) = Warning OR Partide Count > 38µ (/ml) = Warning OR Partide Count > 70µ (/ml) = Warning OR Total Partides (/ml) = Warning )

## New Event Count Indicator

A new Indicator, Event Count has been added for use in Rule Sets and Trending. This new indicator displays the number of Component Events (not observations) that exist for the component, since the date of the previous observation of the same type (Mag Plug, Fluid Analysis). It is useful in determining if observations can be reviewed at face value (Event Count = 0). If events do exist in recent history they should be considered in any observation review.

The example below is checking if the Observation Rating = Normal for the current and previous observation and there have been no events since the previous sample. The Event Count indicator is a cumulative value, if you trend the value for Observations many months or years in the past the Event Count could be quite high as it counts all events from the Observation until today.

The screenshot shows the 'Rule Set Detail' window for 'Event count test Mag Plugs'. The rule is active and was last changed on 17/01/2015 at 3:30 AM by 'cdonnelly'. The rule set check status is 'OK'. The rule configuration includes:

- Component Type Group Like: (empty)
- Component Type Like: %
- Lubricant Like: (empty)
- Component Profile Like: (empty)
- Component Track KPIs flag: Any
- Lube Drained: Any
- Observation Type that Rule applies to: Mag Plug Inspection
- Other indicators must be normal:

The rule set expression is defined in the table below:

[NOT]	(	Rule	)	AND/OR	Order	Last Changed	Last Changed By
		Observation Rating = Normal		AND	10	16/01/2015 3:36 AM	cdonnelly
		1st Previous Observation Rating = Normal		AND	20	16/01/2015 3:36 AM	cdonnelly
		Event Count = 0			30	17/01/2015 3:16 AM	cdonnelly

A red arrow points to the 'Event Count = 0' rule in the table.

## Trakka Rating Populated For Observations with no Data

The Trakka Rating for Observations that don't have an Indicator data is now set as the Observation Rating as there is no facility to calculate a Trakka Rating. These Observations are typically Mag Plug, Filter and Visual Inspections but can be other types as well where only a header of the Observation is needed so a Review can be created.

As Trakka imports these Observations from a Data Connection, CSV Import or Create Observations wizard, it will automatically assign the Observation Rating to the Trakka Rating field. As will all Observations the Assigned Condition Rating is still set via the Review process so the opportunity to set condition of the Observations is not lost.

Inbox 2 - Unreviewed Observations									
1. Unconnected Observations (1009)		2. Unreviewed Observations (117)			3. Incomplete Reviews (2)		4. Completed Reviews		
Asset ID	Component ID	Component Type	Observation Type	Observation Rating	Trakka Rating	Location	Observation Date	Meter Reading	Lub
Truck 100	Truck 100 Final Drive Left Hand	Final Drive	Mag Plug Inspection	Normal	Normal	Trucks	14/10/2014	10530	
Truck 100	Truck 100 Final Drive Left Hand	Final Drive	Mag Plug Inspection	Normal	Normal	Trucks	5/10/2014	10362	
Truck 100	Truck 100 Final Drive Left Hand	Final Drive	Mag Plug Inspection	Normal	Normal	Trucks	30/11/2014	11397	
Truck 100	Truck 100 Front Wheel Bearing Right Hand	Front Wheel Bear...	Mag Plug Inspection	Normal	Normal	Trucks	1/01/2015	11850	
Truck 100	Truck 100 Front Wheel Bearing Left Hand	Front Wheel Bear...	Mag Plug Inspection	Warning	Warning	Trucks	1/01/2015	11850	
Truck 100	Truck 100 Final Drive Right Hand	Final Drive	Mag Plug Inspection	Normal	Normal	Trucks	1/01/2015	11850	
Truck 103	Truck 103 Front Wheel Bearing Right Hand	Front Wheel Bear...	Mag Plug Inspection	Normal	Normal	Trucks	5/01/2015	11960	
Truck 103	Truck 103 Front Wheel Bearing Left Hand	Front Wheel Bear...	Mag Plug Inspection	Normal	Normal	Trucks	5/01/2015	11960	
Truck 103	Truck 103 Final Drive Right Hand	Final Drive	Mag Plug Inspection	Critical	Critical	Trucks	5/01/2015	11960	

## Reviews

Trakka 4.1.0 includes the following enhancements to the Reviews area to speed up the processing time of each Review:

### Only Visible Docking Panel Data is Fetched from Server Initially

To reduce the amount of data requested and processes run each time a new record is selected in the Inbox, Asset Tree or Component Grids, only visible docking panels will be loaded with data initially. If the Results, Trends and Summary tabs are the only docking panels you have docked with data visible, then only these tabs will be loaded with data as you move between records in the master grid control (Inbox, Component Grid etc). This will reduce the time taken to load the docking panels and importantly the time taken between completing one review and the review form opening for the next review (assuming the automatically open next review checkbox is enabled).

Previously data from the Summary, Data List, Results, Reviews and Trends tab were all automatically loaded each time, regardless if they were visible or not.

### Review Forms Load Faster

Changes have been made to how quickly the Review form opens for each new record selection. As some data is more important than others in the Review process, the Review form will now open before some secondary data sets, reducing the idle time between reviews. These changes will not alter that data that is presented in Trakka, just the timing of when it appears will alter by milliseconds.

## Reports

### New Option in “Component Time in Condition” Report

A new option has been added to the Component Time in Condition Report. There is now a checkbox to determine whether Components with the Track KPIs flag are included in the report. Many customers have the Track KPIs flag turned off for non-critical components and aren't concerned about the Time in Condition reporting for those components. This new option now allows the user to control the components that display in the report by using the Track KPIs flag checkbox.

**Print Report - Dingo Trakka**

**Component Time In Condition**

Show Time In Condition Based On:

- Assigned Condition on Reviews
- Observation Rating on Observation

Based on Observation Type: Fluid Analysis

For Components in Current Condition of:

- Critical
- Normal
- Warning
- Unrated

Over This Time Period:

- This Month
- Last 30 Days
- From
- Last Month
- Last 90 Days

21/12/2014 to 21/01/2015

Only include Components with Track KPIs turned on

And filter by Location:

And sort by:

- Component ID
- Current Condition
- Time in Condition

Preview Cancel

# SAP Integration

## Notification Request Groups Actions of Same Priority

The SAP Integration Web Service has been updated to modify the way a Notification Request is posted to SAP. For any Review, now all Actions with the same Priority are grouped together to form one Notification Request. This creates efficiency for the planners who now only need to manage one Notification in SAP for work being done at the same time. This will reduce the number of Rejected Actions/Notifications and improve the feedback loop from SAP to Trakka.

SAP Notification Item bmorton (Bruce Morton of Dingo Software Pty Ltd) [3] [\[\\*\\*Change Filters\]](#)

SAP Notification Batch SAP400 2015-01-20 16:15:00

Component

Exported 20/01/2015 4:15 PM

SOAP Request

In the next week:  
 1. Change the filters.  
 2. Inspect the filters for visible metal and debris, particularly Aluminum flakes.  
 3. Check for transmission for problems such as overheating, sluggish operation, slipping, missed shift points.

[ACTION]  
 \*\*Change Filters  
 \*\*Inspect Filters for Debris  
 Further testing/inspections required

[DESCRIPTION]

SOAP Request Sent 20/01/2015 4:15 PM

SOAP Response

HTTP/200 OK  
 content-id: <soap-54BE6734B7940A20E10080000A5A2024@sap.com>  
 Content-Length: 299  
 Content-Type: text/xml; charset=utf-8  
 Date: Wed, 21 Jan 2015 00:15:03 GMT  
 Set-Cookie: saplb\_\*=pax01pi1\_PIP\_00)5264350; Version=1; Path=/; JSESSIONID=sVDV00N45dcmF0c3dXUj4MjpdCJSwHeU1AA\_SAPiQgHjBFssF7agidkByAQUD3; Version=1; Path=/; JSESSIONID=fA89NwrIZGstPvVfnRH0jTTZg\_Blv7\_uP15TUA; Version=1; Path=/  
 Server: SAP NetWeaver Application Server 7.11 / AS Java 7.11

<SOAP:Envelope xmlns:SOAP=http://schemas.xmlsoap.org/soap/envelope/><SOAP:Header/><SOAP:Body><ns1:createNotificationResponse xmlns:ns1=><NotificationNumber>000091268447</NotificationNumber></ns1:createNotificationResponse></SOAP:Body></SOAP:Envelope>

SOAP Response Received 20/01/2015 4:15 PM

Last Received Long Text

[NOTES]  
 Aluminum has increased sharply and is above normal. Aluminum could indicate torque converter wear. The particle count is low at 14/13/9, so the wear particles are very small, < 5 microns in size. Manganese is also slightly above normal. Oil color has changed to black and dark.

[RECOMMENDATIONS]  
 In the next week:  
 1. Change the filters.  
 2. Inspect the filters for visible metal and debris, particularly Aluminum flakes.  
 3. Check for transmission for problems such as overheating, sluggish operation, slipping, missed shift points.

[ACTION]  
 \*\*Change Filters

Notification Number 000091268447

Linked Review Maintenance Actions

; bmorton (Bruce Morton of Dingo Software Pty Ltd) \*\*Change Filters  
 ; bmorton (Bruce Morton of Dingo Software Pty Ltd) \*\*Inspect Filters for Debris  
 ; bmorton (Bruce Morton of Dingo Software Pty Ltd) Further testing/inspections required

SAP Notification Items								
Find a list of SAP Notification Items according to the following criteria:								
<input checked="" type="radio"/> This Site		<input checked="" type="radio"/> Last Month						
<input type="radio"/> All Sites		<input type="radio"/> Last 3 Months						
		<input type="radio"/> All		<input type="button" value="Apply"/>				
Notification Number	SAP Notification Batch	Exported	Review	SOAP Request	SOAP Request Sent	SOAP Response	SOAP Response Received	Last Received Long Text
000091269126	SAP400 2015-01-21 08:45:03	21/01/2015 8:45 AM	1 POST	21/01/2015 8:45 AM	HTTP/200 OK	21/01/2015 8:45 AM	[NOTES]	
000091269110	SAP400 2015-01-21 08:35:03	21/01/2015 8:35 AM	1 POST	21/01/2015 8:35 AM	HTTP/200 OK	21/01/2015 8:35 AM	01-21-2015 16:34:54 DINGO_HTTP (DINGO_HTTP)	
000091268462	SAP400 2015-01-20 16:15:00	20/01/2015 4:15 PM	2 POST	20/01/2015 4:15 PM	HTTP/200 OK	20/01/2015 4:15 PM	[NOTES]	
000091268420	SAP400 2015-01-20 16:15:00	20/01/2015 4:15 PM	1 POST	20/01/2015 4:15 PM	HTTP/200 OK	20/01/2015 4:15 PM	[NOTES]	
000091268452	SAP400 2015-01-20 16:15:00	20/01/2015 4:15 PM	1 POST	20/01/2015 4:15 PM	HTTP/200 OK	20/01/2015 4:15 PM	[NOTES]	
000091268448	SAP400 2015-01-20 16:15:00	20/01/2015 4:15 PM	2 POST	20/01/2015 4:15 PM	HTTP/200 OK	20/01/2015 4:15 PM	[NOTES]	
000091268430	SAP400 2015-01-20 16:15:00	20/01/2015 4:15 PM	1 POST	20/01/2015 4:15 PM	HTTP/200 OK	20/01/2015 4:15 PM	[NOTES]	





## Data Connections

Trakka 4.1.0 includes the following new Data Connections:

### New Interface with ALS Lab – Images Linked to Samples

A new ALS (<http://www.alsglobal.com/>) data connection has been created that imports an XML file format along with sample or filter patch microscopic images that are linked directly to the fluid samples. This provides an additional layer of visual detail with each sample record.

Type	Fluid Analysis	Fluid Analysis	Fluid Analysis
Observation Date	18/10/2014	12/12/2014	10/01/2015
Observation Code	92378767	92462153	92505596
Meter Reading	0		1
All Time Meter Reading	1		2
Component Age	1		2
Observation Interval Days	0   27	1   55	0   29
Observation Rating	Warning	Warning	Warning
Observation Comment	Iron and copper levels are higher than normal for this unit. Filter patch test revealed a light concentration of particles. Dirt level (aluminium bauxite) abnormal. Oil cleanliness	Bearing/bushing/thrust washer wear indicated. Filter patch test revealed a trace concentration of small particles. Oil cleanliness rating exceeds considered recommended limit.	Iron and copper levels are higher than normal for this unit. Filter patch test revealed no abnormalities. Dirt level (aluminium bauxite) abnormal. Oil cleanliness rating
<b>Lubricant Information</b>			
<b>Linked Review</b>			
Assigned Condition Rating	Normal	Warning	Unrated
Condition Review Notes	*Spectro shows wear and contamination levels are a little high again as is contamination. Patch shows system is outside site target for cleanliness.	Spectro shows iron, copper and sodium is high but trend is mostly unchanged. Patch shows system is outside site target for cleanliness.	
Further Recommendations		Check next sample.	
Fault Effect	N/A	N/A	
Reviewed by	28/10/2014 2:35:44 PM	7/01/2015 3:43:38 PM	by
<b>Attachments</b>			
Attachment Code	Attachment 1 0	1	1
<b>Additives</b>			
Boron (ppm)	25	30	32
Calcium (ppm)	3776	3136	3251
Magnesium (ppm)	40	26	36
Molybdenum (ppm)	94	83	83
Phosphorous (ppm)	648	704	543
Potassium (ppm)	18	12	17
Zinc (ppm)	1816	1553	1627
<b>Contaminants</b>			
Anti-Wear - Infrared (Abs/cm)		16	17
Oxidation (Abs/cm)	47.8	39.5	47.0
Silicon (ppm)	8	6	5
Sodium (ppm)	315	314	253
Sulfur (ppm)	3044	2684	2337
Water (%)	<0.1	<0.1	<0.1

### New Interface with MRG Laboratories – Grease and Oil Analysis

A new interface has been created for the Grease and Oil testing capabilities at MRG Laboratories (<http://mrgcorp.com/>). We now accept a CSV file from this facility that will automatically load into Trakka.



## New Interface with Testoil – Oil Analysis

A new interface has been created for the Oil testing capabilities at Testoil (<http://www.testoil.com>). We now accept a CSV file from this facility that will automatically load into Trakka.

## New Interface with SDMyers – Transformer Analysis

A new interface has been created for the Transformer Oil testing capabilities at SDMyers! (<https://sdmyers.com>). We now accept a zip file containing multiple CSV files from this facility that will automatically load into Trakka.

## Other

### Advance Notice – Support for Windows XP/2003/Vista and SHA 1 certificates ending in 2015

Please note that certain industry changes that have been imposed on the technology world by Microsoft and others will take effect for Dingo customers in 2015 as follows.

Although Windows XP and Windows 2003 Server have been officially out of support from Microsoft for some time, there are still many corporations and individuals that happily use Windows XP and Windows 2003 without incident. Windows XP and Windows 2003 do not receive any new security or bug fixes, service packs or updates from Microsoft. Microsoft has also ended Mainstream Support for Windows Vista in 2012 and ends Extended Support in 2017.

SHA 1 certificates are no longer available and any certificate that expires from this point forward cannot be renewed as SHA 1. SHA 256 certificates will be the only option moving forward. Dingo will not need to renew its certificates until April 2015 at which time this will become a SHA 256 certificate.

Windows XP and Windows 2003 Server do not fully support SHA 256 and as such we will not be able to deploy Trakka to a Windows XP or Windows 2003 machine when this happens. Furthermore, Dingo has taken a strategic decision to no longer officially support Windows Vista from April 2015 as well. Dingo will only officially support the Trakka product on Windows 7 and above from April 2015.

**What is affected:** Windows XP, Windows 2003 and Windows Vista operating systems with SHA 1 Certificates.

**Impact:** If you upgrade your PC's to run Windows 7 or higher there will be no impact. If you do not update PC's running Windows XP, Windows 2003 or Windows Vista, the Trakka product will not deploy – Please note that no support will be available from Dingo for Trakka running on any version of Windows earlier than Windows 7

**Timing:** April 2015 onwards

