

Matrix 3 Addendum Dealertrack Opentrack Integration

3A4999A
EN

Part No. 25C490

Integration Information

How to Use this Addendum

This addendum supplements the Matrix 3.0 Premier Software Installation manual, Graco part number 313108. It contains information specific to the setup and use of the Matrix 3.0 integration with the Dealertrack provided Opentrack third party integration platform.

Prerequisites for Integration

To take advantage of this integration, the end user must:

- Be a current Dealertrack customer.
- Have purchased Graco part number 25C490 - Matrix 3.0 Premier software with Dealertrack integration.
- Have a current integration contract with Graco, Inc.
- Be current on all applicable integration fees.

Integration Overview

What the Matrix Interface Software Does

The Matrix interface with the Dealertrack Opentrack platform allows control over service fluids through the DMS. All Matrix dispenses are automatically validated against Dealertrack repair orders and then automatically posted to the Dealertrack repair order ensuring all dispensed fluid is accounted for in the DMS.

How the Matrix Interface Software Works

A. Work Order Validation

With the integration turned on, dispenses only occur when a valid repair order exists in Dealertrack. First, Matrix sends a validation request to the DMS when a repair order number is entered through the Matrix software or at a Matrix meter. The DMS then responds telling Matrix whether or not the dispense should be authorized. There are three different levels of validation strength that can be set to further control fluid dispensing.

Level 1 - Valid repair order with a line for posting

This is the default validation level for the interface.

Through Work Order Validation, Matrix ensures that the repair order number entered into Matrix exists and is open. Matrix will also identify the existence of a valid line for posting through one of two methods.

- A line number can be entered in the JobCode field. For this method to work properly, the end user will need to know which line on the repair order should contain the relevant fluid. If the job code field is populated, Matrix will search the repair order to see if this line is valid for posting fluid.
- Matrix will search through the repair order for a line set to a labor op code that matches a labor op code associated with the target fluid. (See Fluid Setup, page 8 for instructions related to setting labor op codes.)

In all cases Matrix uses the first line that meets one of the above two criteria on a repair order. If no line can be found that meets the criteria, a dispense will not be authorized.

Level 2 - Valid repair order with a line that contains the fluid part number

Level 2 validation introduces the requirement for the fluid part number to be present on the repair order.

A repair order number with an optional line number is first entered, (this is the same as Level 1 validation). By also confirming that the fluid part number exists on the repair order, this level of validation can prevent an improper fluid from being dispensed. Consequentially, if a fluid should be dispensed that does not exist in the Dealertrack repair order, it must be added in Dealertrack before authorization to dispense will be granted through Matrix.

In order to prevent repeat dispenses of the same fluid on the same repair order, the repair order line in Dealertrack is closed after the dispense from Matrix is posted.

Level 3 - Valid repair order with a line that contains the fluid part number fluid quantity

Level 3 validation adds a part quantity entry in Dealertrack.

Repair orders for this level of validation can only be entered into Matrix through the PC client, not through the meter.

In addition to validating all Level 2 information, a meter set to Level 3 validation cannot dispense a quantity of fluid greater than what is on the repair order in Dealertrack unless an allowance for top off has been set on the meter profile. If no quantity is set in Dealertrack, the dispense will not be authorized. As with Level 2 validation, the repair order line is closed after dispense posting.

B. Work Order Posting

After a dispense is complete, Matrix posts the amount dispensed to the repair order validated through Work Order Validation, page 2. Dealertrack then responds with a confirmation to Matrix

Integration Setup

Security Certificate Setup

In order for the integration to function properly, security certificates for the Dealertrack server must be loaded for Matrix. A batch file is provided with the software installation to facilitate this through the Windows command line prompt.

1. Open the windows command line prompt. If you do not know how to open the command line prompt. Try typing "cmd" in the Windows search field and press enter.

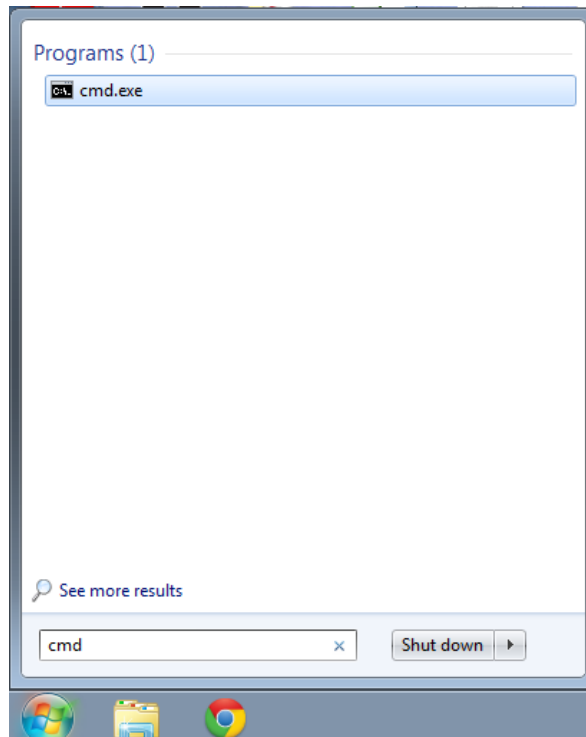


FIG. 1

2. Navigate to the '..\Matrix 3\Common' folder. In a default installation this can be completed with the commands shown in FIG. 2.



FIG. 2

- The final command in the previous step (Step 2) executes the .bat file. After the batch file has been executed, the command prompt will ask for a certificate.

Enter '1' and press the return key.

```
Administrator: C:\Windows\system32\cmd.exe - install_cert.bat ot.dms.dealertrack.com
atrixUtility.jar com.graco.led.matrix.InstallCert ot.dms.dealertrack.com
Loading KeyStore jsscacerts...
Opening connection to ot.dms.dealertrack.com:443...
Starting SSL handshake...

No errors, certificate is already trusted

Server sent 2 certificate(s):

1 Subject CN=ot.dms.dealertrack.com, O="DEALERTRACK, INC", L=New Hyde Park, ST=
New York, C=US
   Issuer CN=DigiCert SHA2 High Assurance Server CA, OU=www.digicert.com, O=Digi
iCert Inc, C=US
   sha1 ab e3 9c a1 2e 5e e0 69 99 93 89 90 80 c5 a7 16 65 4e 7f 68
   md5 4b 70 e6 8f a5 39 7b c0 82 da 85 c3 2b 9d 84 d8

2 Subject CN=DigiCert SHA2 High Assurance Server CA, OU=www.digicert.com, O=Digi
iCert Inc, C=US
   Issuer CN=DigiCert High Assurance EU Root CA, OU=www.digicert.com, O=DigiCer
t Inc, C=US
   sha1 a0 31 c4 67 82 e6 e6 c6 62 c2 c8 7c 76 da 9a a6 2c ca bd 8e
   md5 aa ee 5c f8 b0 d8 59 6d 2e 0c be 67 42 1c f7 db

Enter certificate to add to trusted keystore or 'q' to quit: [1]
```

FIG. 3

Enabling the Matrix Integration in the Dealertrack Store

Before Matrix can integrate with the Dealertrack Opentrack platform, the Matrix integration must be enabled through the Dealertrack store.

Instructions on how to enable certified Opentrack partner systems, like Matrix, can be found in the Dealertrack provided "Opentrack Partner Setup 2.0" document. This DMS quick-start guide can be obtained from Dealertrack.

NOTE: Enabling the Opentrack API for Matrix will trigger billing with Graco for use of the interface.

External Interface Setup

The external interface dialog is used to configure the Opentrack server credentials and core integration behavior. This dialog can be accessed through the "Interface" option under "Matrix System" settings.

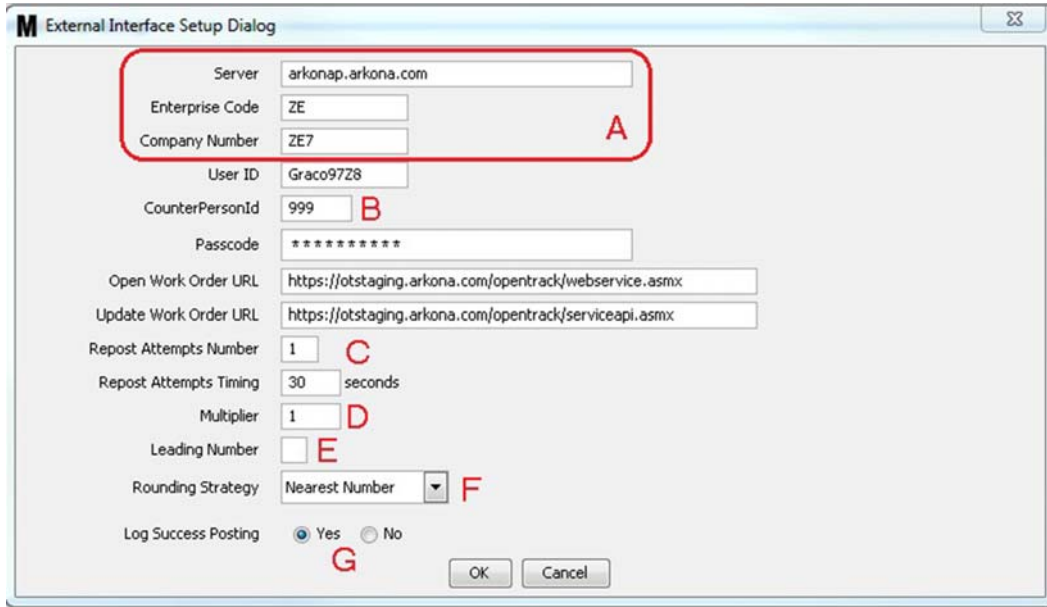


FIG. 4

A Opentrack server credentials

Server credentials are unique to each specific site and must be retrieved from Dealertrack provided resources. Replace the "p" in the server field with the Dealertrack server number.

Example: For server 7, the server field should read: arkona7.arkona.com.

B CounterPersonId

When an update is performed on a repair order, an ID associated with the individual making the change is recorded. As Matrix updates repair orders autonomously, it requires an ID to record with the change. While any valid ID from Dealertrack can be used in the CounterPersonId field, best practice is to create a unique ID in Dealertrack specific to Matrix to avoid confusion on the origin of updates.

NOTE: UserID and Passcode values do not need to be configured and should be left at their default values.

C Repost attempts number & Repost attempts timing

If a post to update a repair order is not successful on the first attempt, Matrix will try and post again. The number of times Matrix will attempt to post and the interval between the attempts is configurable.

D Multiplier

While Matrix will record all dispenses quantities out 2 decimal places, Dealertrack will only accept whole numbers. The rounding strategy setting (F) determines how Matrix will ensure only whole numbers are posted. In order to avoid the loss of accuracy that results from rounding, a multiplier can be configured. This multiplier will need to be replicated in the Dealertrack system.

Example: In Dealertrack, typically 1 unit is 1 quart. After a 1.8 quart dispense, Matrix will post a 2 quart dispense to the repair order. If Dealertrack is configured such that 1 unit is .1 quarts, Matrix should be setup with a multiplier of 10. Now, after a 1.8 quart dispense, Matrix will post a value of 18 which will be the equivalent of 1.8 quarts in the Dealertrack system.

E Leading number

As Matrix can only accept 8 character in a repair order number and Dealertrack allows repair orders up to 9 characters long, a leading character can be configured. This leading character is static and will be appended on the front of every repair order posted from Matrix. The interface cannot accommodate a use case where all 9 characters in the repair order are used and the first character cannot be made static.

F Rounding strategy

As Dealertrack only accepts whole numbers, the rounding strategy used by Matrix before posting dispense quantities can be configured to always round to the nearest whole number or to always round up. Regardless of the rounding strategy, Matrix will always maintain the fractional amounts in the Matrix historic dispense database.

G Log success posting

Optionally, Matrix can report a successfully posted dispense to the system event log. By default, Matrix only reports when a dispense fails to post as for some installations successful posting will be a frequent event.

Fluid Setup Changes From Matrix Premier

When using the Dealertrack Opentrack integration, there are two additional fields which must be configured when setting up Fluids.



FIG. 5

- **Fluid**
The fluid field **MUST MATCH** the Part Number for the fluid in Dealertrack. If the two values do not match, the integration will not function.
- **Manufacturer**
The manufacturer field **MUST MATCH** the two character manufacturer code associated with the fluid / part inside of Dealertrack. If the two values do not match, the integration will not function.
- **Labor Op Codes**
Optionally, labor op codes can be associated with a fluid. Multiple labor op codes can be associated with each fluid using a comma to separate the op codes as shown in the above image. This field facilitates easier posting to the correct line on a repair order. Its use is predicated on the verification level setting described in the meter setup section of this manual.

Meter Profile Changes From Matrix Premier

The integration contains three levels of validation which can be configured on a per meter basis through the meter profile setup screen. Each increase in level corresponds with an increase in the verification strength.

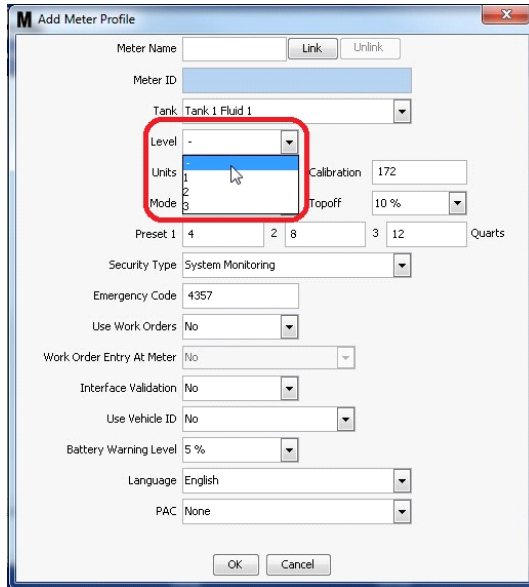


FIG. 6

NOTE: For further detail on how each validation level works, see the “How it works” section in this manual addendum.

Frequently Asked Questions

Q: What if my RO does not validate?

A: There are multiple reasons an external validation may fail. The system event log will display a description of the error. Common errors include:

- Error Processing Request

Credentials in the Third Party Interface screen of Matrix are not properly entered. Check the Opentrack server credentials in the External Interface Setup dialog for accuracy.

- No valid details found for Repair Order

RO & Line Number / Labor Op Code combination does not exist, or is no longer open for additional charges to be added inside of the Dealertrack system. Confirm that the RO exists and that a valid line is open for posting.

- Labor Op Codes not configured for fluid

If the line is left blank, Matrix will use labor op codes to validate the RO line. Either ensure a line number is being entered into the RO or assign labor op codes for the fluid.

Q: What if my RO does not post?

A: There are circumstances which allow validation of an RO to be dispensed, but will fail upon posting. The system event log will display a description of the error. Common errors include:

- The part number does not exist or has an incorrect manufacturer

Setup of the fluid in Matrix does not match setup in Dealertrack. This can be a discrepancy on the Fluid OR the Manufacturer, Matrix cannot distinguish which. Alternatively, this error can also be thrown if the available inventory in the Dealertrack system has become negative. Check your fluid setup in Matrix and ensure it matches Dealertrack. Also check your inventory levels in Dealertrack.

- The CounterPersonID does not exist

The configured CounterPersonId does not match an ID in Dealertrack. Dealertrack requires a CounterPersonID when updating lines on an RO. This ID can be that of an existing user or Matrix must be assigned it's own ID inside of Dealertrack in order to perform the automatic updates. Ensure your CounterPersonID exists in Dealertrack.

Graco Software Warranty

Graco warrants all equipment manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twenty-four months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

Graco makes no warranty, and disclaims all implied warranties of merchantability and fitness for a particular purpose in connection with accessories, equipment, materials or components sold but not manufactured by Graco. These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

FOR GRACO CANADA CUSTOMERS

The parties acknowledge that they have required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English. Les parties reconnaissent avoir convenu que la rédaction du présente document sera en Anglais, ainsi que tous documents, avis et procédures judiciaires exécutés, donnés ou intentés à la suite de ou en rapport, directement ou indirectement, avec les procédures concernées.

Graco Information

For the latest information about Graco products, visit www.graco.com.

TO PLACE AN ORDER, contact your Graco distributor or call to identify the nearest distributor.

Phone: 612-623-6928 or **Toll Free:** 1-800-533-9655, **Fax:** 612-378-3590

All written and visual data contained in this document reflects the latest product information available at the time of publication. Graco reserves the right to make changes at any time without notice.

Original instructions. This manual contains English. MM 3A4999

Graco Headquarters: Minneapolis

International Offices: Belgium, China, Japan, Korea

GRACO INC. P.O. BOX 1441 MINNEAPOLIS, MN 55440-1441

Copyright 2017, Graco Inc. is registered to ISO 9001

www.graco.com

January 2017