

**287838 v0.1**

Aptean Ltd  
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**A**aptean

DHL CTMS

# Mapping, Implementation & UAT Support of Paragon Flow

## FUNCTIONAL SPECIFICATION - 10.6

- 0.1

Reference: 287838 TH-8FVJN2

## 1.1 Client Requirement

### Change Request Summary:

Mapping, implementation and UAT support of the Paragon flow. Define standard format of data exchange in both flows out and in.

### Change Request Details:

Mapping, implementation and UAT support of the Paragon flow. Define standard format of data exchange in both flows out and in. Based on SDD issued 8th April 2011.

### Benefits identified as a result of the change:

Migration component.

## 1.2 Solution

OBS will configure the C-TMS Paragon Interface (Inbound and Outbound) to conform to the BAT format.

The standard Paragon CSV interface will be used as available in the Paragon Interface screen (PAR\_INT v10.12 or later). This standard functionality will allow the creation of a CSV formatted files outbound and action the upload of a specifically formatted CSV file inbound. These files can be transferred to or from an individual PC and will be contain or upload data into the CTMS database.

C-TMS development changes have been identified for the ?Reset New? functionality. This occurs in two places:

- ?Reset New? button
- Active prompt after completion of a Paragon Trip inbound file upload

*N.B. The system currently will reset ALL orders at status new and does not take account of segregation of multiple customers. This RIO will not cover this development and a new RIO will be raised separately. This will be required before the deployment of the second customer that requires use of the Paragon Interface.*

### Outbound Parameters:

The Paragon Interface screen allows, via manual control, the creation of a CSV file containing C-TMS Order data ready for upload in to the Paragon application. There are a series of parameters that will be available to constrain the Order selections that are included in the output.

This file has a fixed format, controlled by the system parameter ?PARAGON\_INSTALLED?. OBS will set this to use the ?BAT? format.

### Inbound Parameters:

The Paragon Interface screen allows, via manual control, the upload of a CSV file containing Paragon Trip data.

This file can have a dynamic format but must match that configured in the Imports Maintenance screen (IMPORTS\_MAINT v1.13 or higher) with a format name of ?Paragon Trip Detail?. OBS will configure this format to match the BAT Paragon Trip format.

### Workshop:



In addition to the setup detailed above, an OBS analyst will attend workshops (Webex) as required to analyse the data required by Paragon and the layout/format to be provided by C-TMS with indication of the appropriate fields within the C-TMS Paragon Order CSV file that will be provided. The information required by C-TMS for the upload of the Paragon Trip CSV file will also be covered. Advice will be provided on standard C-TMS configuration options for the Paragon interface to enable the setup of the Paragon application by Paragon.

### **Considerations/Assumptions:**

This will be applied to both the C-TMS Industrial test application INPF (INDTST) and the live application INLV (INDPRD).

An element of implementation and testing time is included in this estimate to provide assistance, on request, during the initial testing phases as new Paragon Order files are sent and new Paragon Trip files are received.

*N.B. It is understood from the requirements that no C-TMS development changes are required under this RIO. As such it is suggested that a Functional Specification will not be required.*

As this work entails setup/configuration only, an ?Implementation Specification? document will be provided in place of a ?Functional Specification?. This will document the setup changes applied and basic instruction on operation of the Paragon interface.

In order for OBS to correctly resource the test and production server capacity for the inbound files to be received, an indication of average daily (weekday & weekend) file volumes to be sent to C-TMS are required.

*N.B. This estimate does not cover further application development. In the event of scope change identified as a result of the Paragon Interface testing additional development RIOs will be required.*

**In the event of further implementation advice/assistance required as a result of Paragon interface testing, beyond the time covered in this estimate, a further RIO would be required to cover this additional work. OBS will advise once the time estimated on this RIO has been fully utilised.**

## **1.3 Scope**

This change will be applied to system version 10.6.0 on INDTST and once approved INDPD.



## 2 Set-up

### 2.1 Pre-requisites

None

### 2.2 Menu Structure

?Unchanged?

### 2.3 Data

The system parameters will be setup as described in section 3.1.



## 3 IMPLEMENTATION Description

### 3.1 Outbound Parameters

System parameters will control which version of the Paragon order export flow will be operational:



System Parameter	Expected Value
PARAGON_RUNNING	Y
PAR_SLOT_CUTOFF_TIME	60
PAR_TRIP_STATUS	PLANNED
PARAGON_INSTALLED	BAT

- ?PARAGON\_RUNNING? should be set to ?Y? to indicate that the Paragon interface is operational.
- ?PAR\_SLOT\_CUTOFF\_TIME? indicates the number of minutes before the slot window start time that it closes to new orders.
- ?PAR\_TRIP\_STATUS? indicates the status of any trips that are created via the ?Paragon Interface?.
- ?PARAGON\_INSTALLED? should be set to ?BAT? to indicate that the ?BAT? file format will be operational for the export of orders.

N.B. ?PARAGON\_INSTALLED? is currently set to ?DUN? in the ?INDPRD? database so a change will be required to store the system parameter as ?BAT? with configuration at the cost-centre level (i.e. ?STL?) so that a specific file format may be used per customer.

?Config By? will be ?COST\_CENTRE? and ?Config By Value? will be ?STL?.

The existing configuration in ?INDPRD? may be retained as a default (i.e. ?Config By? as ?SYSTEM?, ?Config By Value? as ?NONE? and ?Value? as ?DUN?).



The ?Reset New? button updates the status of orders for the schedule from ?NEW? to ?UNSCHEDULED? if the system parameter ?PARAGON\_INSTALLED? is ?BAT?.

The ?Export? button produces the ?Orders to Paragon? report if the system parameter ?PARAGON\_INSTALLED? is not ?HCR? or ?XML?.

The process then runs ?CSV.ORDERS\_TO\_PARAGON? for the 6 parameters set in the ?Order Export? tab page of the screen. The function ?CSV.WRITE\_ORDERS\_TO\_PARAGON? then

The output path is taken from the system parameter ?MTS\_CSV\_EXPORT\_PATH? or ?MTS\_EXPORT\_PATH?.

Decoded values for ?PARAGON\_LOCATIONS? and ?PARAGON\_TRAILERS? may also be setup as required:

The ?BAT? file format is described below:

Field	Field Name	Size and Format	Paragon Keyword
1	Location ID	Alphanumeric (Max 16)	CUST.ID
2	Name	Alphanumeric	CUST.NAME
3	Street Address	Alphanumeric (lines of the address separated by commas)	CUST.LONGADDR
4	Town	Alphanumeric	CUST.SHORTADDR
5	Post Code	Alphanumeric	CUST.POSTCODE

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6	Latitude	Numeric, positive or negative relating to north/south	CUST.LAT
7	Longitude	Numeric, positive or negative relating to east/west	CUST.LONG
8	Vehicle Acceptability	Alphanumeric in a binary format, where 1 is acceptable, and 0 is unacceptable (e.g. ?10011?). Alternatively you can use Y/N.	CUST.TEXT01
9	Run Key	{Each of the vehicle types needs to be mapped to a byte position on this string}	CALL.TEXT01
10	Location ID	Alphanumeric (16), same as the customer ID above	CALL.ID
11	Weight in Kg	Integer	CALL.MEASURE1
12	Volume in cm3	Integer	CALL.MEASURE2
13	Depot ID	Alphanumeric (Max 16)	CALL.DEPOTID
14	Earliest Delivery Date and Time	{Means the depot to delivery from or collect into}	CALL.TEXT02
15	Latest Delivery Date and Time	YYYYMMDD HH24:MI	CALL.TEXT03
16	Variable Unloading Time	Integer (minutes)	CALL.USER01
17	Fixed Unloading Time	Integer (minutes)	CALL.USER02
18	Order Type (Delivery or Collection)	Alphanumeric (1), D=delivery, C=Collection	CALL.TYPE
19	C-TMS Order Reference	Numeric	CALL.USER03
20	Customer Order Reference Number	Alphanumeric	CALL.TEXT04
21	Product Type (Chilled or Ambient)	Alphanumeric	CALL.TEXT05
22	Delivery Type, Carrier Type	Alphanumeric	CALL.TEXT06
23	Special Instruction	Alphanumeric	CALL.TEXT08
24	Phone Number	Alphanumeric	CALL.TEXT09
25	E-mail	Alphanumeric	CALL.TEXT10
26	Delivery Unit Type	Alphanumeric	CALL.TEXT12
27	Quantity	Numeric	CALL.USER12
28	Delivery Unit Type	Alphanumeric	CALL.TEXT13
29	Quantity	Numeric	CALL.USER13
30	Delivery Unit Type	Alphanumeric	CALL.TEXT14
31	Quantity	Numeric	CALL.USER14
32	Delivery Unit Type	Alphanumeric	CALL.TEXT15
33	Quantity	Numeric	CALL.USER15
34	Delivery Unit Type	Alphanumeric	CALL.TEXT16
35	Quantity	Numeric	CALL.USER16

## 3.2 Inbound Parameters

System parameters will control from where the Paragon trip import files may be uploaded:





Parameter Name	Config By	Config By Value	Value	Description
MTS_IMPORT_VIRTUAL_PATH	SYSTEM	NONE	/webint/indstst/import/	MTS Virtual Import Path
MTS_LOCATION_USAGE	SYSTEM	NONE	NONE	Controls how Locations are grouped, either via CUST_OR
MTS_UNQ_DEPOT_DEPARTS	SYSTEM	NONE	N	Do departure times need to be unique - Y or N
MTS_WIDE_SCREEN	SYSTEM	NONE	Y	Should Execution screen be available in Wide Screen
MTS_ENABLE_SECURITY	SYSTEM	NONE	Y	Is Security Enabled - Y or N
MTS_EXPORT_PATH	SYSTEM	NONE	/u03/webint/mtstst/export	Second path that exports looks for when writing a csv to th
MTS_FILE_UPLOAD_URL	SYSTEM	NONE	/launcher.html	URL for launching the MTS File Upload
MTS_FTP_VBAPP_IMPORT_PATH	SYSTEM	NONE	/mtstst/import/	MTS Import Path for the VB ftp application
MTS_IMPORT_PATH	SYSTEM	NONE	/u03/webint/mtstst/import/	MTS Import Path
MTS_LATEST_REVISION	SYSTEM	NONE	27/03/2011 09:00:00	Latest MTS Version
MTS_LOG_DIR	SYSTEM	NONE	/u03/webint/mtstst/logs/	Path where MTS application error logs are written to
MTS_OUTBOUND_ORDER_PATH	SYSTEM	NONE	/u03/webint/mtstst/interface/out	File path for Outbound Orders
MTS_PRODUCT_RELEASE	SYSTEM	NONE	85	MTS Product RELEASE
MTS_PRODUCT_VERSION	SYSTEM	NONE	10.7.0	MTS Product Version

## System Parameter      Expected Value

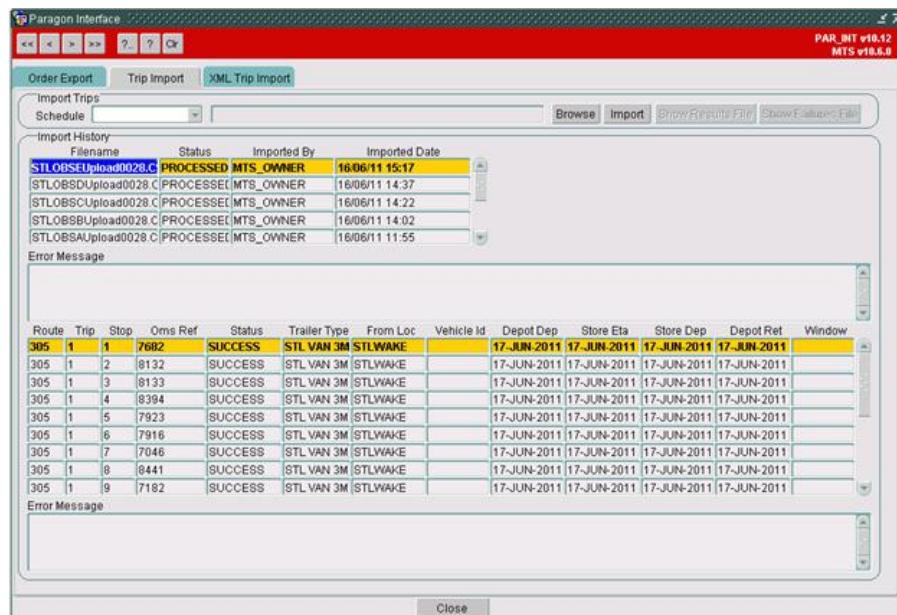
MTS\_FILE\_UPLOAD\_URL ./launcher.html

MTS\_IMPORT\_PATH TBC

MTS\_LOG\_DIR TBC

PARAGON\_INSTALLED BAT

- ?MTS\_FILE\_UPLOAD\_URL? indicates the URL for launching the MTS file upload process.
- ?MTS\_IMPORT\_PATH? indicates where the import files will be located.
- ?MTS\_LOG\_DIR? indicates where the log files for the import files will be located.
- ?PARAGON\_INSTALLED? should be set to ?BAT? to indicate that the ?BAT? file format will be operational for the trip import.



Import History			
Filename	Status	Imported By	Imported Date
STLOBSEUpload0028.C	PROCESSED	MTS_OWNER	16/06/11 15:17
STLOBSDUpload0028.C	PROCESSED	MTS_OWNER	16/06/11 14:37
STLOBSCUpload0028.C	PROCESSED	MTS_OWNER	16/06/11 14:22
STLOBSSUpload0028.C	PROCESSED	MTS_OWNER	16/06/11 14:02
STLOBSAUpload0028.C	PROCESSED	MTS_OWNER	16/06/11 11:55

Error Message

Route	Trip	Stop	Orns Ref	Status	Trailer Type	From Loc	Vehicle Id	Depot Dep	Store Eta	Store Dep	Depot Ret	Window
305	1	1	7682	SUCCESS	STL VAN 3M	STLWAKE		17-JUN-2011	17-JUN-2011	17-JUN-2011	17-JUN-2011	
305	1	2	8132	SUCCESS	STL VAN 3M	STLWAKE		17-JUN-2011	17-JUN-2011	17-JUN-2011	17-JUN-2011	
305	1	3	8133	SUCCESS	STL VAN 3M	STLWAKE		17-JUN-2011	17-JUN-2011	17-JUN-2011	17-JUN-2011	
305	1	4	8394	SUCCESS	STL VAN 3M	STLWAKE		17-JUN-2011	17-JUN-2011	17-JUN-2011	17-JUN-2011	
305	1	5	7923	SUCCESS	STL VAN 3M	STLWAKE		17-JUN-2011	17-JUN-2011	17-JUN-2011	17-JUN-2011	
305	1	6	7916	SUCCESS	STL VAN 3M	STLWAKE		17-JUN-2011	17-JUN-2011	17-JUN-2011	17-JUN-2011	
305	1	7	7046	SUCCESS	STL VAN 3M	STLWAKE		17-JUN-2011	17-JUN-2011	17-JUN-2011	17-JUN-2011	
305	1	8	8441	SUCCESS	STL VAN 3M	STLWAKE		17-JUN-2011	17-JUN-2011	17-JUN-2011	17-JUN-2011	
305	1	9	7182	SUCCESS	STL VAN 3M	STLWAKE		17-JUN-2011	17-JUN-2011	17-JUN-2011	17-JUN-2011	

Error Message

A file to upload may be found using the ?Browse? button and uploaded using the ?Import? button.

For example:

```
run-tmstst: # cat /webint/indstst/import/processed/STLOBSEUpload0028.CSV.20110616_15:17:59
```

```
305,1,1,1,7682,"271528","STL VAN 3M","17311","STLWAKE","STL WAKE","20110617 09:02","20110617 09:13","20110617 07:30","20110617 07:30","20110617 08:00","20110617 17:51","20110617 19:31","20110617 19:31","00:00","00:00","00:00"
```



The existing ?Paragon Trip Detail? format in ?INDPRD? is displayed below:

Record Type	Field Type	Source Type	Occ	Source Value	Prefix	Pad	Char	Default	Format
BREAK_3	FIELD		0	24					
TRIP_END	FIELD		0	18					
TRIP_START	FIELD		0	14					
WISE_REF	FIELD		0	6					
DROP	FIELD		0	3					
CL_DEPART	FIELD		0	17					
SU_ARRIVE	FIELD		0	13					
ROUTE	FIELD		0	1					
TRIP	FIELD		0	2					
STOP	FIELD		0	4					
OMS_REF	FIELD		0	5					

Record Type	Field Type	Source Type	Occ	Source Value	Prefix	Pad	Char	Default	Format
STOP	FIELD		0	4					
OMS_REF	FIELD		0	5					
TRAILER_TYPE	FIELD		0	7					
FROM_LOC	FIELD		0	9					
DEPOT_DEPART	FIELD		0	15					
STORE_DEPART	FIELD		0	12					
DEPOT_RETURN	FIELD		0	16					
STORE_ETA	FIELD		0	11					
BREAK_2	FIELD		0	20					
BREAK_1	FIELD		0	19					
CARRIER	FIELD		0	10					

The expected field sequence is displayed below:

Field	Field Name	Size and Format
1	Paragon Route Number	Numeric
2	Paragon Trip Number	Numeric
3	Paragon Drop Number	Numeric
4	Paragon Trip Position	Numeric
5	C-TMS Order Reference	Numeric
6	Customer Order Reference	Alphanumeric
7	Vehicle Type	Alphanumeric
8	Location ID	Alphanumeric
9	Depot Code (Call.DepotName)	Alphanumeric
10	Vehicle Group Name (Carrier)	Alphanumeric
11	Arrival at Call	YYYYMMDD HH24:MI
12	Departure from Call	YYYYMMDD HH24:MI
13	Route Start Time	HH24:MI
14	Trip Start Time	HH24:MI



15	Departure from Depot	HH24:MI
16	Return time to Depot	HH24:MI
17	Trip End Time	HH24:MI
18	Route End Time	HH24:MI
19	Total Break Duration from Previous Call	minutes
20	Total Break Duration at this Call	minutes
21	Total Break Duration until next Call	minutes

Each field type will be extracted from the file and validated and stored on the ?PAR\_TRIP\_DTL? table to later update the orders and trips planned.

Once a file has been uploaded the status of the order will be updated from ?NEW? to ?UNSCHEDULED?.

## References

Ref No	Document Title & ID	Version	Date
1	EST-287838 TH-8FVJN2 Map, Impl & UAT Support of Paragon Flow v1.0.doc	1.0	08/06/11
2	FS-285937 PL-8DWKXF BAT C-TMS Paragon Integration v1.0.doc	1.0	24/02/11

## Glossary

Term or Acronym	Meaning
C-TMS	Calidus TMS
CSV	Comma Separated Values

## Document History

Version	Date	Status	Reason	Initials
0.1	20/06/11	Draft	Initial version	PDR



## 4 AUTHORISED BY

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