

**285961 v1.0**

Aptean Ltd  
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## Contents

<b>1 285961.....</b>	<b>1</b>
1.1 Client Requirement.....	2
1.2 Solution.....	2
1.3 Scope.....	2
<b>2 Set-up.....</b>	<b>3</b>
2.1 Pre-requisites.....	3
2.2 Menu Structure.....	3
2.3 Data.....	3
<b>3 Functional Description.....</b>	<b>4</b>
<b>4 AUTHORISED BY.....</b>	<b>8</b>

1 285961

**A**aptean

DHL C-TMS

## Action Late Reason Codes Received from LOTS

### FUNCTIONAL SPECIFICATION - 10.6

13/04/2012 - 1.0  
Reference: 285961 JB-8DWU9B



## 1.1 Client Requirement

### Change Request Summary:

Action late reason codes received in message from LOTS.

### Change Request Details:

1. Late reason codes will only be sent upon delivery confirmation and will be parameterised (on/off) on LOTS.2. Please provide relevant functionality to make the necessary debrief screen updates using the message provided.3. ESI will be required to map the LOTS (maximum 3 digit code) to the longer C-TMS code.

Benefits identified as a result of the change:

Users can manage late reason codes in one system and provide visibility to customers.

## 1.2 Solution

A change will be made to allow the stop reason codes to be extracted from the XML flow from LOTS. This will require the appropriate new XML tags to be assessed for the late reason codes provided for the trip stops.

The late reason codes in C-TMS may be up to 12 characters in length and any new codes required by LOTS will need to be setup.

The valid late reason codes at the trip stop will be applied only to the late orders at the stop. The late orders will be obtained using the same logic present in the ?Trip Debrief? screen when the ?Add Time Reason(s)? button is pressed.

## 1.3 Scope

This change will be applied to system version 10.6



## 2 Set-up

### 2.1 Pre-requisites

As mentioned in the CLIENT REQUEST, ESI will be required to map the LOTS reason codes to the C-TMS reason codes

### 2.2 Menu Structure

?Unchanged?

### 2.3 Data

An new reason codes required for LOTS will be loaded into the SCH\_LATE\_REASON table. The data will be provided by the Business users.



## 3 Functional Description

The existing procedure for processing LOTS inbound data will be amended to accept and process Stop Reason Codes. To allow the data to be processed, a new interface table will be created to store the stop reason records  
INT\_XML\_STOP\_REASONS

INT\_XML\_SEQ

FILE\_NAME

EXTERNAL\_SYSTEM

EVENT\_DATE

RECORD\_STATUS

TRIP\_ID

STOP\_SEQ

RC\_TYPE

RC\_CODE

RC\_DESCRIPTION

RC\_COMMENT

VALIDATION\_ERROR

CREATED\_BY

CREATED\_DATE

Within the existing stop processing, further code will be added to process any stop reason records at each stop.

Validation of the stop reason data will be carried out , firstly to check that the reason code exists on C-TMS and secondly to check for null values and duplicate records. The reason code will be compared with the data in the C-TMS table SCH\_LATE\_REASONS. If the reason code does not exist in this table, an error will be written and stored. If the reason code already exists against the stop, an error will written and stored.

Any null reason codes will create and store an error. After validation, the reason record will be inserted into the interface table. If there are no errors, the record will be inserted with a record\_status ?NEW?.

If there are errors, the record will be created with a status FAIL and the error will be written to the validation\_error field. In addition, the stop interface record in INT\_XML\_TRIP\_STOP will be updated. The VALIDATION\_ERROR field will be populated with the message ?There was a problem with a reason code at this stop? This will be available to view in the Interface Errors screen on the XML\_TRIPS tab.



The XML\_TRIPS screen will be amended to display the records from the INT\_XML\_STOP\_REASON table. The screen will be amended to display the information as header and details records, following the format of the XML\_ORDER tab, which displays order and line information.

Orders	EMTS Or	LOONET	Bookings	DSO Trip	EFX Inb	POD Det	LOTS	XML Ord...	XML Trips	PO Inbou	PO Outb	XML Out	Unsch																																																																																																																																		
<div style="display: flex; justify-content: space-between;"> <span>Ord</span> <span>Type</span> <span>Customer</span> <span>From Loc</span> <span>Search</span> </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Line Index ID</th> <th>Ord</th> <th>Type</th> <th>Status</th> <th>Cost Centre</th> <th>Customer</th> <th>From Loc</th> <th>To Loc</th> <th>Scheduled Name</th> <th>Early Avail</th> <th>Later Avail</th> <th>Early Del</th> <th>Later Del</th> </tr> </thead> <tbody> <tr> <td>DNO_ORD_1.xml</td> <td>ORD</td> <td>FAILURE</td> <td>EXEL</td> <td>UNILEVER</td> <td></td> <td>SMC BLAN</td> <td>SMC BLAN</td> <td>110322</td> <td>22-MAR-20</td> <td>22-MAR-20</td> <td>22-MAR-20</td> <td>22-MAR-20</td> </tr> <tr> <td>DNO_ORD_SMG3.xml</td> <td>ORD</td> <td>FAILURE</td> <td>EXEL</td> <td>UNILEVER</td> <td></td> <td>NOT KNOW</td> <td>NOT KNOW</td> <td>110322</td> <td>22-MAR-20</td> <td>22-MAR-20</td> <td>22-MAR-20</td> <td>22-MAR-20</td> </tr> <tr> <td>FP_ORD_7.xml</td> <td>ORD</td> <td>FAILURE</td> <td>EXEL</td> <td>JIEYES</td> <td></td> <td>DHLTHET</td> <td>AOPASOME</td> <td>110329</td> <td>28-MAR-20</td> <td>28-MAR-20</td> <td>29-MAR-20</td> <td>29-MAR-20</td> </tr> <tr> <td>FP_ORD_5.xml</td> <td>ORD</td> <td>FAILURE</td> <td>EXEL</td> <td>JIEYES</td> <td></td> <td>DHLTHET</td> <td>AOPASOME</td> <td>110329</td> <td>28-MAR-20</td> <td>28-MAR-20</td> <td>29-MAR-20</td> <td>29-MAR-20</td> </tr> <tr> <td>FP_ORD_3.xml</td> <td>ORD</td> <td>FAILURE</td> <td>EXEL</td> <td>JIEYES</td> <td></td> <td>DHLTHET</td> <td>AOPASOME</td> <td>110329</td> <td>28-MAR-20</td> <td>28-MAR-20</td> <td>29-MAR-20</td> <td>29-MAR-20</td> </tr> <tr> <td>FP_ORD_2.xml</td> <td>ORD</td> <td>FAILURE</td> <td>EXEL</td> <td>JIEYES</td> <td></td> <td>DHLTHET</td> <td>AOPASOME</td> <td>110329</td> <td>28-MAR-20</td> <td>28-MAR-20</td> <td>29-MAR-20</td> <td>29-MAR-20</td> </tr> <tr> <td>DNO_ORD20.XML</td> <td>ORD</td> <td>FAILURE</td> <td>EXEL</td> <td>UNILEVER</td> <td></td> <td>DMO BLAN</td> <td>DMO BLAN</td> <td>110322</td> <td>22-MAR-20</td> <td>22-MAR-20</td> <td>22-MAR-20</td> <td>22-MAR-20</td> </tr> <tr> <td>DNO_ORD18.XML</td> <td>ORD</td> <td>FAILURE</td> <td>EXEL</td> <td>UNILEVER</td> <td></td> <td>BLANKLOC</td> <td>BLANKLOC</td> <td>110322</td> <td>22-MAR-20</td> <td>22-MAR-20</td> <td>22-MAR-20</td> <td>22-MAR-20</td> </tr> <tr> <td>DNO_ORD16.XML</td> <td>ORD</td> <td>FAILURE</td> <td>EXEL</td> <td>UNILEVER</td> <td></td> <td>BLANKLOC</td> <td>BLANKLOC</td> <td>110322</td> <td>22-MAR-20</td> <td>22-MAR-20</td> <td>22-MAR-20</td> <td>22-MAR-20</td> </tr> </tbody> </table>														Line Index ID	Ord	Type	Status	Cost Centre	Customer	From Loc	To Loc	Scheduled Name	Early Avail	Later Avail	Early Del	Later Del	DNO_ORD_1.xml	ORD	FAILURE	EXEL	UNILEVER		SMC BLAN	SMC BLAN	110322	22-MAR-20	22-MAR-20	22-MAR-20	22-MAR-20	DNO_ORD_SMG3.xml	ORD	FAILURE	EXEL	UNILEVER		NOT KNOW	NOT KNOW	110322	22-MAR-20	22-MAR-20	22-MAR-20	22-MAR-20	FP_ORD_7.xml	ORD	FAILURE	EXEL	JIEYES		DHLTHET	AOPASOME	110329	28-MAR-20	28-MAR-20	29-MAR-20	29-MAR-20	FP_ORD_5.xml	ORD	FAILURE	EXEL	JIEYES		DHLTHET	AOPASOME	110329	28-MAR-20	28-MAR-20	29-MAR-20	29-MAR-20	FP_ORD_3.xml	ORD	FAILURE	EXEL	JIEYES		DHLTHET	AOPASOME	110329	28-MAR-20	28-MAR-20	29-MAR-20	29-MAR-20	FP_ORD_2.xml	ORD	FAILURE	EXEL	JIEYES		DHLTHET	AOPASOME	110329	28-MAR-20	28-MAR-20	29-MAR-20	29-MAR-20	DNO_ORD20.XML	ORD	FAILURE	EXEL	UNILEVER		DMO BLAN	DMO BLAN	110322	22-MAR-20	22-MAR-20	22-MAR-20	22-MAR-20	DNO_ORD18.XML	ORD	FAILURE	EXEL	UNILEVER		BLANKLOC	BLANKLOC	110322	22-MAR-20	22-MAR-20	22-MAR-20	22-MAR-20	DNO_ORD16.XML	ORD	FAILURE	EXEL	UNILEVER		BLANKLOC	BLANKLOC	110322	22-MAR-20	22-MAR-20	22-MAR-20	22-MAR-20
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The block outlined above, will store the stop reason records on the XML\_TRIPS tab.

In the STOP\_REASON data-block, the validation error field will record if the reason code did not exist on C-TMS.

After the data processing has completed, the ?NEW? records in INT\_XML\_STOP\_REASON will be processed. To process the records, all orders on the stop will be identified. If the order is identified as late (using the code currently run in the debrief screen when the ?ADD TIME REASON ?BUTTON is pressed.

The screenshot shows the Trip Delimiter software interface. At the top, there's a menu bar with 'File', 'Edit', 'View', 'Help', and a toolbar with icons for 'New', 'Open', 'Save', 'Print', 'Exit', 'Refresh', 'Filter', 'Find', 'Revalidate', and 'Set Status'. The main window has a title bar 'Sched 110329' and a dropdown 'Trip' with a 'Find' button. Below is a toolbar with buttons for 'Add Order', 'Calc Times', 'View POD', 'General', 'Driver Delivered', 'Order Delivered', 'Order Items', 'Finance', and 'Audit'. The 'Audit' button is highlighted in green. The main data area has a table with columns: Stop, Stop Location, Stop Location, CMS Ref, Line, DU City, DU City, DU City, Plan, Weight, Del. Weight, Plan Volume, Plan Cases, Del. Cases, Qty, Variance. Below the table are buttons for 'Layout: 4: DHL', 'Set Delays', 'Set Del', 'Audit Time Reason(s)', 'Non Conformance', and 'POD/CMR No'. At the bottom, there's another table with columns: Stop, Planned Arr, Dep, Actual Arr, Dep, Type, Location, Distance, Drive Min, Trailer Type, Trailer ID, Activities. Buttons at the bottom include 'Get Del Times', 'Set Del Times', 'Set Actuals', 'Print', 'Print', 'Close', 'Get Item Actuals', and 'Get All Actuals'. On the right side, there's a vertical toolbar with buttons for 'C: D', 'POD', and 'POD/CMR No'. A scroll bar is visible on the right side of the main data area.

If an order is identified as being late, the stop reason record will be added to the SCH\_ORD\_LATE\_REASON table.

Field Name	Value
------------	-------

SCHED\_NAME Derived from the stop



OMS_REF	Derived from the stop
TRIP_ID	INT_XML_STOP_REASON.TRIP_ID
LATE_CODE	INT_XML_STOP_REASON.RC_CODE
COMMENTS	INT_XML_STOP_REASON.RC_COMMENT

A check will be run against the TRIP\_ID, OMS\_REF and LATE\_CODE. If a record already exists on the table, the record\_status in the INTERFACE table (INT\_XML\_STOP\_REASON) will be set to ?FAIL? and ?Duplicate reason record? will be written to the validation\_error field.

If the record is successfully inserted in SCH\_ORD\_LATE\_REASON, the record status will be updated to ?SUCESS?.

### Table Updates Required

CREATE NEW TABLE INT\_XML\_STOP\_REASON

INT\_XML\_SEQ

FILE\_NAME

EXTERNAL\_SYSTEM

EVENT\_DATE

RECORD\_STATUS

TRIP\_ID

STOP\_SEQ

RC\_TYPE

RC\_CODE

RC\_DESCRIPTION

RC\_COMMENT

VALIDATION\_ERROR

CREATED\_BY

CREATED\_DATE

### References

Ref No	Document Title & ID	Version	Date
EST-285961 JB-8DWU9B	Action Late Reason Codes Received from LOTS v1.0	1.0	18/02/11

### Glossary

#### Term or Acronym Meaning



**Document History**

<b>Version</b>	<b>Date</b>	<b>Status</b>	<b>Reason</b>	<b>Initials</b>
0.1	29/03/11	Draft	Initial version	SW
1.0	13/04/11	Issue	Reviewed and Issued	MJC



## 4 AUTHORISED BY

<b><i>Matt Crisford</i></b>	Development Manager
<b><i>Peter Greer</i></b>	TMSCC MTS Product Manager

