283810 v1.0

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DHL C-TMS

Create 2 new reports for UK Healthcare

FUNCTIONAL SPECIFICATION - 10.6

20/01/2011 - 1.0
Reference: 283810 NW-8BGNGD

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1.1 Client Requirement

Change Request Summary:

Create two new reports for UK Healthcare.Kate Vallentine/Milton Keynes/UK/Exel

Change Request Details:

Create two new reports / exports as per attached documents. Details are included in the notes section and as comments against cells. The two KPI Reports should contain a front page summary and then a detailed export.

Benefits identified as a result of the change:

Business requirement to allow reporting from the TMS.

1.2 Solution

Create 2 new extracts in CSV format. Each extract will be based on the same detail information , with customers included or excluded from the extract. The Campus Extract will exclude the following clients:

COVIDIEN, SMITHS & BACKHAUL, while the OPS extract will be only for COVIDIEN, SMITHS & BACKHAUL. Additional customers will be controlled via parameter/look up table, to be defined in specification.

Both extracts will have a different front summary sheet.

The extracts will be created using a PL/SQL package and will be added as 2 separate procedures to the existing KPI package. Data required for calculations and data returned from calculations will be stored in temporary variables and will not be written back to the database.

New records will be added to the rep-report and rep_report_param tables to allow the extracts to be run from the export screen within C-TMS.

Detail Page

The detail data will be presented at Order Line level and will be ordered by trip and departure time.

Schedule date	Sch_ord
Delivery Date	Sch_trip_stop
Trip Number	Sch_trip_stop
Trip Status	Sch_trip
Delivery Depot	Sch_trip (owning depot)
Carrier	Sch_trip
Customer ID	Sch_ord
Customer Name	Sch_ord
Customer Ref	Sch_ord
Delivery Type	Sch_ord
Driver	Sch_trip
Tractor	Sch_trip
Trailer Type	Sch_trip_stop/ sch_trip
Trailer ID	Sch_trip_stop/ sch_trip
Trip Stop Location Name	Sch_trip_stop
Postcode	Geo_location
Location Type	Geo_location
Location Trailer Restrictions	Res_resource
Activity	Sch_haulage_activity

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Planned Arr	Sch_trip_stop
Actual Arr	Sch_trip_stop
Planned Dep	Sch_trip_stop
Actual Dep	Sch_trip_stop
Planned Drop Time	Calc
Actual Drop Time	Calc
Trip Comments	Sch_trip
Product Type	Sch_order_line
Temp Combo	Sch_ord
DU type	Sch_order_line
Planned DU Qty	Calc by du type
Actual Desp DU qty	Calc by du type
Actual Del DU qty	Calc by du type
DU Var	Calc
DU qty returned	Calc by du type
Vehicle fill %RPE	Calc
Planned Weight	Calc by du type
Actual Weight	Calc by du type
Weight Variance	Calc by du type
Vehicle Fill% Weight	Calc
Planned Lifts	Calc by du type
Actual Lifts	Calc by du type
Lifts Variance	Calc by du type
Vehicle Fill %Lifts	Calc
Planned Km	Sch_trip
Actual Km	Sch_trip
Variance Km	Calc
Planned hrs	Sch_trip_stop
Actual hrs	Sch_trip_stop
Variance hrs	Calc
Vehicle / Driver%Utilisation	Calc
POD	Sch_ord
Non Conformance code	Sch_ord_non_conform
Non conformance desc	Sch_ord_non_conform
Non conformance reason	Sch_ord_non_conform
Order Comments	Sch_ord
Order Special Instructions	Sch_ord

Both extracts will be based on the same parameters:

- COST CENTRE
- CLIENT
- CARRIER
- DELIVERY DEPOT
- DATE RANGE values and types

The date range type will be a static list with the values ?SCHED_NAME?,?ORDER CREATED?.?ORDER DELIVERED?

The value of the this parameter will determine how the dates are applied to the where clause

Ops Extract Summary Sheet

The following data will be analysed by Collection (inbound) and Delivered (outbound).

Orders

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Despatch Units

Weight

Lifts (a new field as part of another RIO)

Vehicle Utilisation by carrier

Vehicle utilisation will be analysed by RPE, Lifts and Time.

A further block will analyse Trip data, splitting the trips into Own Fleet, Internal Sub Contract and External Sub Contract and a count of each status.

OWN FLEET - The owning depot is the hub location of the carrier

INTERNAL SUB CONTRACT - The owning depot is not the hub location of the carrier. The carrier is of type FLEET and has been assigned a hub location.

EXTERNAL SUB LOCATION - The carrier does not have a hub location and is set up as a HAULIER.

The trip data will be further analysed by the carrier types to show total KM, total hours, average shift, average trips, and trips no completed. If the user has selected a specific Carrier all the trip information will be analysed by the carrier, if the user has selected ALL carriers, the data will be of summary of ALL and not by individual carriers.

If the user has selected a single Carrier, the trips analysis will be limited to trips which have been assigned this carrier, so OWN FLEET, INTERNAL SUB and EXTERNAL SUB will not all be relevant.

OTD (on time deliveries) will be reported as a %, the calculation of this field will differ depending on the COST_CENTRE of the order (HUK or BAX) (On time for HUK = delivered by latest delivery time on order.

On time for BAX = delivered no more than an hour earlier or three hours later than the planned delivery time.)

Parameters will be created for BAX_OTD and HUK_OTD , to store the calculation.

Finally there will be an analysis of Planned v?s actual listed by non conformance reasons, this will be based on analysis of the REASON CODE in the SCH_ORD_NON_CONFORM table.

Campus Extract Summary Sheet

The extract will analyse Orders, DUs and Lifts by the three Carrier categories (own fleet, internal sub and external sub) Again, this analysis will depend on the Carrier parameter that the user has selected. The Carrier categories will be split further into inbound and outbound trips.

Like the OPS summary, this extract will also be summarised by status and display the OTD % and an analysis of non conformance.

The calculations required for the summary sheets will be described in more detail in the functional spec.

1.3 Scope

This change will be applied to system version 10.6.

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2 Set-up

2.1 Pre-requisites

2.2 Menu-Structure

2.3 Data

Two new records will be added to REP_REPORT, one for each extract.

OPS Extract

Campus Extract

Records for each extract will be added to REP_REPORT_PARAM.

The records will be for parameters

COST CENTRE

CLIENT

CARRIER

DELIVERY DEPOT - Trips will be included if the drop off or pick up from this depot

DATE RANGE TYPE - Either Sched Name, Order Created, Order Delivered

DATE RANGE - Date from and Date too.

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3 Functional Description

Two new extracts will be written to be printed in CSV format. The extracts will be referred to as OPS and CAMPUS in this specification. Both extracts will contain the same detail section but will have a different summary.

The Campus extract will run for all clients except:-

COVIDEN

SMITHS & BACKHAUL

The OPS extract will run for clients :-

COVIDEN

SMITHS & BACKHAUL

To create these new extracts two procedures will be added to the KPI package.

Parameters

Both extracts will use the same parameters.

COST CENTRE

CLIENT

CARRIER

DELIVERY DEPOT - Trips will be included if the drop off or pick up from this depot

DATE RANGE TYPE - Either Sched Name, Order Created, Order Delivered

DATE RANGE - Date from and Date too.

The date range type will determine which date the date range is applied to.

Sched Name - orders with a sched name (Sch_Ord.Sched_Name) within the range will be included.

Order Created - orders created (Sch_Ord.Date_Created) within the range will be included

Order Delivered - Orders delivered within the date range will be included, this will be based on the actual arrival time at the stop for the to location of the order.

Detail Page

Both extracts will print the same columns for the detail section. The table below details the database column that will be displayed or in the case of a calculated column will show the calculation to be used.

Schedule date	Sch_ord.Sched_name
Delivery Date	Sch_trip_stop.Arrive
Trip Number	Sch_trip_stop.Trip_ID
Trip Status	Sch_trip.Trip_Status
Delivery Depot	Sch_trip.owning depot
Carrier	Sch_trip.Carrier_ID
Customer ID	Sch_ord.Customer
Customer Name	Org_Customer.Customer_name
Customer Ref	Sch_ord.External_Ref
Delivery Type	Sch_ord.Delivery_Type_Id

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Driver	Res_Person.Forename\Surname
Tractor	Sch_trip.Tractor_ID
Trailer Type	Sch_trip_stop.Trailer_Type
Trailer ID	Sch_trip_stop.Trailer_ID
Trip Stop Location Name	Sch_trip_stop.Location_ID (Link To Geo_Location
Postcode	Geo_location.Postcode
Location Type	Geo_location.Branch
Location Trailer Restrictions	Max Trailer length against location
Activity	Sch_haulage_activity.Activity_Name
Planned Arr	Sch_trip_stop.Arrive
Actual Arr	Sch_trip_stop.Actual_Arrive
Planned Dep	Sch_trip_stop.Depart
Actual Dep	Sch_trip_stop.Actual_Depart
Planned Drop Time	Sch_trip_stop.Depart - Sch_trip_stop.Arrive
Actual Drop Time	Sch_trip_stop.Actual_Depart - Sch_trip_stop.Actual_Arrive
Trip Comments	Use TRM.Get_Trip_Comments
Product Type	Sch_order_line.Product_Type
Temp Combo	Sch_ord.Temp_Combo_ID
DU type	Sch_order_line.DU_Type
Planned DU Qty	Sch_order_line.Quantity
Actual Desp DU qty	Sch_order_line.Actual_Despatched_Quantity
Actual Del DU qty	Sch_order_line.Actual_Quantity
DU Var	Sch_order_line.Actual_Quantity - Sch_order_line.Quantity
DU qty returned	Qty on an order with a non conformance
Vehicle fill %RPE	Actual RPE as a % of Res_trailer_type.Max_RPE
Planned Weight	Sch_order_line.Weight
Actual Weight	Sch_order_line.Actual_Weight
Weight Variance	Sch_order_line.Actual_Weight - Sch_order_line.Weight
Vehicle Fill% Weight	Actual Weight as a % of Res_trailer_type.Max_Weight
Planned Lifts	To be added later. Header to be included in extract
Actual Lifts	To be added later. Header to be included in extract
Lifts Variance	To be added later. Header to be included in extract
Vehicle Fill %Lifts	To be added later. Header to be included in extract
Planned Km	Sch_trip.Distance
Actual Km	Sch_trip.ODO_End - Sch_trip.ODO_Start
Variance Km	Calculated Value of Actual - Sch_trip.Distance
Planned hrs	Sch_trip.Drive_Time
Actual hrs	Sch_trip.End_Time - Sch_trip.Start_Time
Variance hrs	Calculated Value for Actual Hrs - Sch_trip.Drive_Time
Vehicle / Driver%Utilisation	Time the vehicle was in use as a % of 24 hours
POD	Sch_ord.POD
Non Conformance code	Sch_ord_non_conform.Reason_Code
Non conformance desc	Sch_reason_code.Description
Non conformance reason	Sch_ord_non_conform.Comments
Order Comments	Sch_ord.Comments
Order Special Instructions	Sch_ord.Special_Instructions

N.B. Lifts are being added under a separate RIO.

OPS Summary Section

The summary section will be printed above the details section already mentioned.

The first part of the summary will display the parameters that were used to generate the Report, these will be

COST CENTRE

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CLIENT

CARRIER

DELIVERY DEPOT

DATE RANGE

The summary will then show the totals for the extract broken down into different sections. Firstly it will show

Number of Orders

Number of Despatch Units

Weight

Number of Lifts

Vehicle Utilisation by Carrier

This will be further broken down to show

Collected

Delivered

Returned

Total

Balance

	Collected	Delivered	Returned	Total	Balance
Orders					
Despatch Units					
Weight					
Lifts					
Vehicle Utilisation by Carrier (3 lines for RPE, Lifts and Time)					

The balance will be the total delivered minus the returned and will show for the DU?s only.

The vehicle utilisation will show the RPE, Lifts and Time for the extract. This will be calculated based on the total available time, RPE and Lifts for the chosen date range. The time will be the number of hours vehicles were in use as a percentage of the total time for all trips. The number of RPE?s shown as a percentage of the total number of Max RPE?s for the trailers on the trips. N.B. Lifts will not be included at this point. Each total will be shown against the Inbound and outbound trips.

The next section of the summary will show the Trip information split into 3 categories, Own Fleet, Internal Subcontract and External Sub Location.

OWN FLEET - The owning depot is the hub location of the carrier

INTERNAL SUB CONTRACT - The owning depot is not the hub location of the carrier. The carrier is of type FLEET and has been assigned a hub location.

EXTERNAL SUB LOCATION - The carrier does not have a hub location and is set up as a HAULIER.

For each category the extract will show,

- Trips by status and a total of all trips
- Total KM of the trips
- Total Hours of the trips
- Average shift per driver / vehicle - the average shift duration across the trips. This will be calculated as ?Total hours for all trips \ number of trips?

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- Average trips per day per vehicle - This will be calculated by counting the number of trips divided by the number of trailers used.
- Trips not Completed - Trips not at status completed or trips that do not have all actuals entered.
- On Time Deliveries (see below)
- Planned Vs actuals show against then Non conformance code used - the number of time a non conformance code was used.

OTD (on time deliveries) will be reported as a %, the calculation of this field will differ depending on the COST_CENTRE of the order (HUK or BAX) (On time for HUK = delivered by latest delivery time on order.

On time for BAX = delivered no more than an hour earlier or three hours later than the planned delivery time.)

Parameters will be created for BAX_OTD and HUK_OTD , to store the calculation.

Campus Summary Section

The summary section will be printed above the details section already mentioned.

The first part of the summary will display the parameters that were used to generate the Report, these will be

COST CENTRE

CLIENT

CARRIER

DELIVERY DEPOT

DATE RANGE

The next section will show a breakdown of the orders, du types and lifts for each of the 3 carrier categories detailed in the last section.

The total number of orders will be shown, this will then be split into Inbound and Outbound for each of the 3 categories with a percentage total for each category. The percentage total will be the number of trips in that category shown as a percentage of the total trips.

The DU?s will be shown split by DU type and product type. This will give a total per DU type and product type used and also a percentage total which will be the percentage of the total DU?s.

	Own Fleet				Internal Sub Contract				External Sub Contract			
	Total	Collected	Delivered	Total %	Collected	Delivered	Total %	Collected	Delivered	Total %		
Orders												
DU's												
Lifts												

The next section of the summary will show the Trip information split into the 3 carrier categories.

For each category the extract will show,

- Trips by status and a total of all trips
- On Time Deliveries (see below)
- Planned Vs actuals show against then Non conformance code used - the number of time a non conformance code was used.

The on time deliveries will be calculated in the same way as described for the OPS summary.

The Lifts column in the detail section, and also any use of Lifts in the summary will be added at a later date. The development behind the Lifts column has not yet taken place. The column headings will be included in the extracts.

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Document History

Version	Date	Status	Reason	Initials
0.1	20/01/11	Draft	Initial version	DNG
1.0	20/01/11	Issue	Reviewed and Issued	MJC

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