# 246857

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# 2 246857-LH-7BAJPN Paragon Dates





# 3 FUNCTIONAL OVERVIEW

## 3.1 Client Requirement

Previously referenced as LH-6YEJBM while development responsibility was with CapGemini prior to transition to OBS. All trip times in the radial route to be fixed as per the interface feed from Paragon. Trunking routes / their calculations to remain the same as per current functionality.

The arrival and departure times at each delivery to be fixed as per the current interface feed from Paragon; SU depart and CL arrive to be created as Paragon times; SU arrive and CL depart to be calculated by MTS as per the current default parameter rules. This change will save planners time not having to manually set departure times. Will allow amendment of road speeds, speed reduction areas and rush hour scheduling in Paragon.

Further client requirement 10/3 - Further two columns will be provided to allow the SU arrive and CL depart to be set from Paragon. Also requirements changed to include driver breaks initially thought to be embedded into the paragon times and hence wouldn?t be visible in MTS plan. See e-mail from Lee Hudson.

## 3.2 Solution

The paragon trips csv file contains times for depot depart, store eta, store departure and depot return. These times will be used to generate the PAR trips in MTS and the TRIP stopFile:Example.jpgs will be set accordingly. The SU planned arrival and DU planned depart will be provided from Paragon as an extension to scope; see comment above. The trip DL (and PK) stops planned arrival and planned depart will be set from the store eta and store dep respectively of the Paragon csv. The trip stops will be updated to ?fixed? so that the times derived from the Paragon csv are locked into MTS and not updated be revalidation of the Trip. The planners can un-check the fix if required to manually override Paragon. The PAR_INT form that is used to view and manage the interface files will be modified to show all times in the paragon csv. Two additional fields from Paragon, will be sent to MTS to define driver breaks. Field 1 will represent Break taken en-route and field 2 Break taken at store. Each break field shows the time in HH:MM:SS format.

## 3.3 Scope

This change will be applied to system version 10.6.

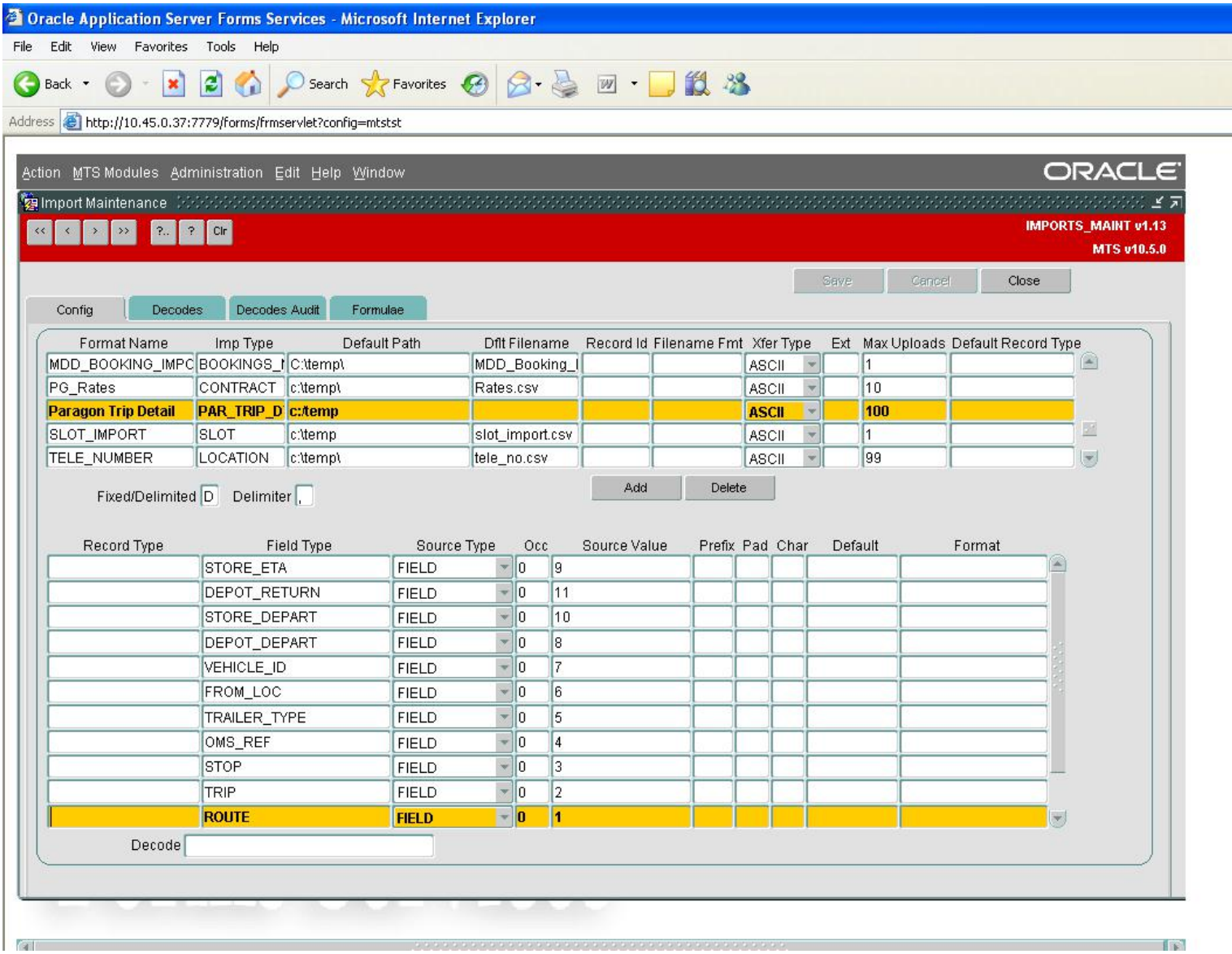


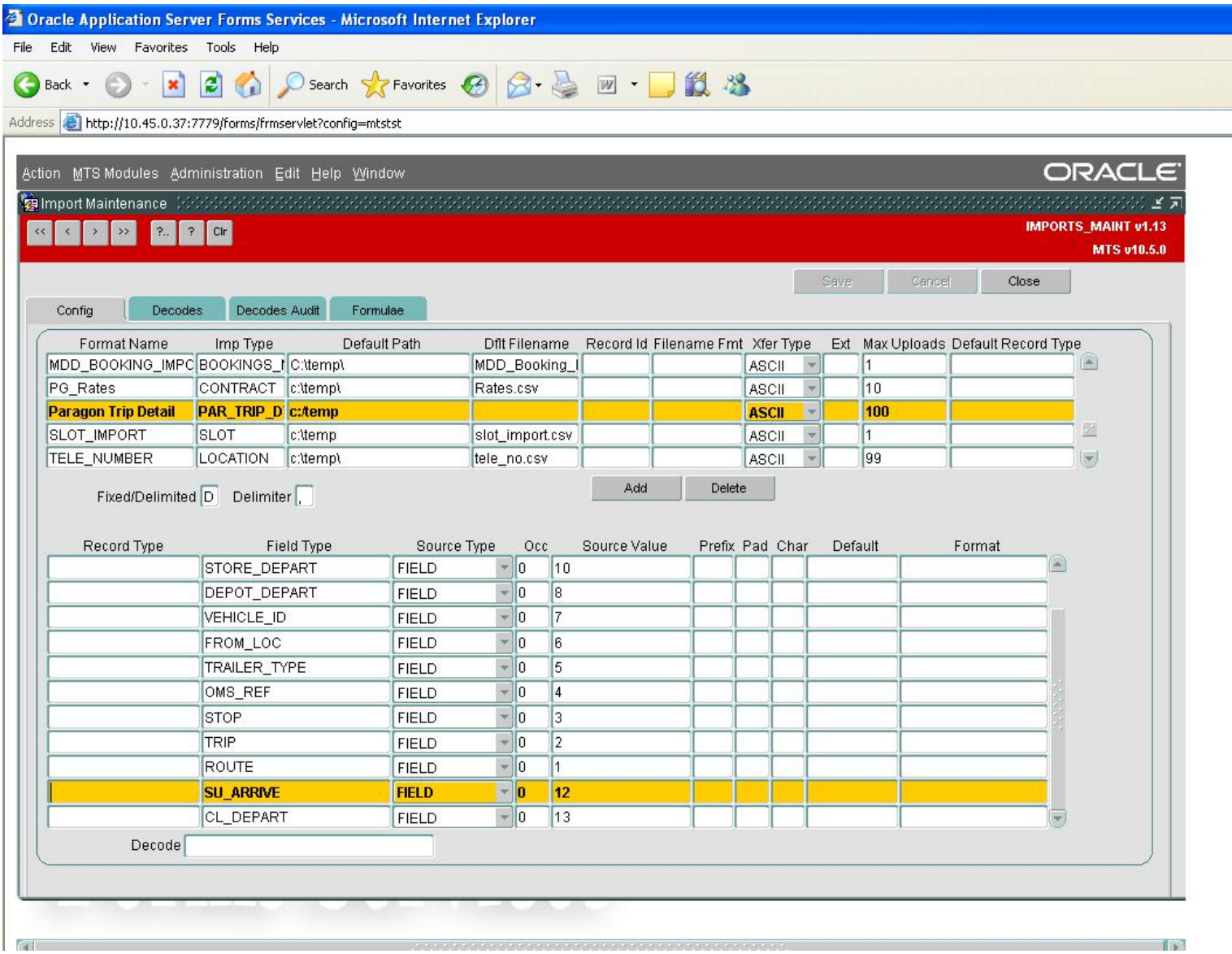


# 4 Set-Up

## 4.1 Data

Additional columns will be made available in the Imports Maintenance form to control the paragon times and these need to be added to any user defined (manually created) Paragon imports.






Additionally, the two fields denoted the two types of driver breaks fields will be added.

# 5 FUNCTIONAL DESCRIPTION

## 5.1 Import Changes

The file provided out of Paragon will be in a CSV format as:

```
Route, Trip, Stop, OMS Ref, Trailer Type, From Location, Vehicle ID, Depot Depart, Store ETA, Store Depart,

1,1,1,946934,20ftcont,DHLTHET,,05:03 Mon,07:30 Mon,08:08 Mon,12:41 Mon,04:33 Mon,13:11 Mon,07:30-18:31,,00:
```

The day/time columns provided are Deport Depart, Store ETA, Store Depart, Depot Return, SU Arrive and CL Depart. These columns will need to be translated into a valid date format before they can be stored in the intermediate table (PAR_TRIP_DTL) in the database. The OMS Ref will be used to retrieve the schedule name and this in turn will allow the start date (DD/MM/YYYY) for the schedule to be derived. This date will be compared with the day of the week provided and if they match then this is the date that is used. If the day of the week does not match then the next matching date going forward will be used. i.e. It is assumed that the day provided is the next matching day of the week from when the schedule starts. You can not plan more than a week into the future but in reality it is understood that the operation only plan one day in advance.

## 5.2 Paragon Code Changes

Once the data is loaded into the intermediate table then it will be used to create trips for the orders received back from Paragon schedule. The existing code will remain unchanged and the trip will initially be created in exactly the same way that it is doing now. The code will then update all of the arrival and departure times generated by MTS and set them based upon the time provided by Paragon.

It will be assumed that each trip will consist of an initial SU stop from the depot were all of the orders are loaded. This will only need to be updated (SU Arrive and Deprt Depart) for the first order as all of the subsequent orders on this trip will have the same values.

The trip will then have a series of DL stops were the orders are being dropped off. The earliest arrival time (Store ETA) for the orders at each stop will be used to update each corresponding stop record. The latest departure time (Store Depart) for the orders at each stop will be used to update each corresponding stop record.

The trip will then have a CL stop for the return of the empty truck to the depot. Again this will only be updated once (Depot Return and CL Depart) for the first order as all subsequent orders will have the same values.

The code for calculating breaks, stopovers, RPE quantities, Temperatures etc. are assumed to be taken care of from within Paragon and the trip information returned will incorporate these restrictions.

Two additional fields from Paragon, will be sent to MTS to control driver breaks.

```
1: Break taken en-route (category 1 above)
2: Break taken at store (category 2 above)
```

Each shows the time in HH:MM:SS format

If a break is shown in the first new field i.e. en-route to the next stop, this should be shown as a break at that stop. If a break is shown in the 2nd new field i.e. during unload this should be shown as a break at the previous stop and timings at that stop adjusted accordingly. The timings in the Paragon feed will be incorrect for this stop as we will have moved the break to be at the previous stop and paragon will incorporate this into the current stop i.e.

| Stop | Location | Arrive | Depart | Order | Time | Note Paragon |
|---|---|---|---|---|---|---|
| 1 | Kettering | 07:30 | 08:45 | 1 | 1hr 15 | Correct |
| 1 | Kettering | 08:45 | 08:48 | 2 | 0hr 03 | Correct |
| 2 | Nuneaton | 09:50 | 11:27 | 1 | 1hr 37 | Duration incorrectly includes a break Break 10:13 10:58 |
| 2 | Nuneaton | 11:27 | 11:28 | 2 | 0hr 01 | Correct |

Assuming that as per the above ruleset we will have moved this break to be before the driver gets to Nuneaton i.e.

| Stop | Location | Arrive | Depart | Order | Time | Note |
|---|---|---|---|---|---|---|
| 2 | Nuneaton | 10:35 | 11:27 | 1 | 0hr52 | Arrival time adjusted to factor in that break is taken before arrival |
| 2 | Nuneaton | 11:27 | 11:28 | 2 | 0hr 01 | Correct |



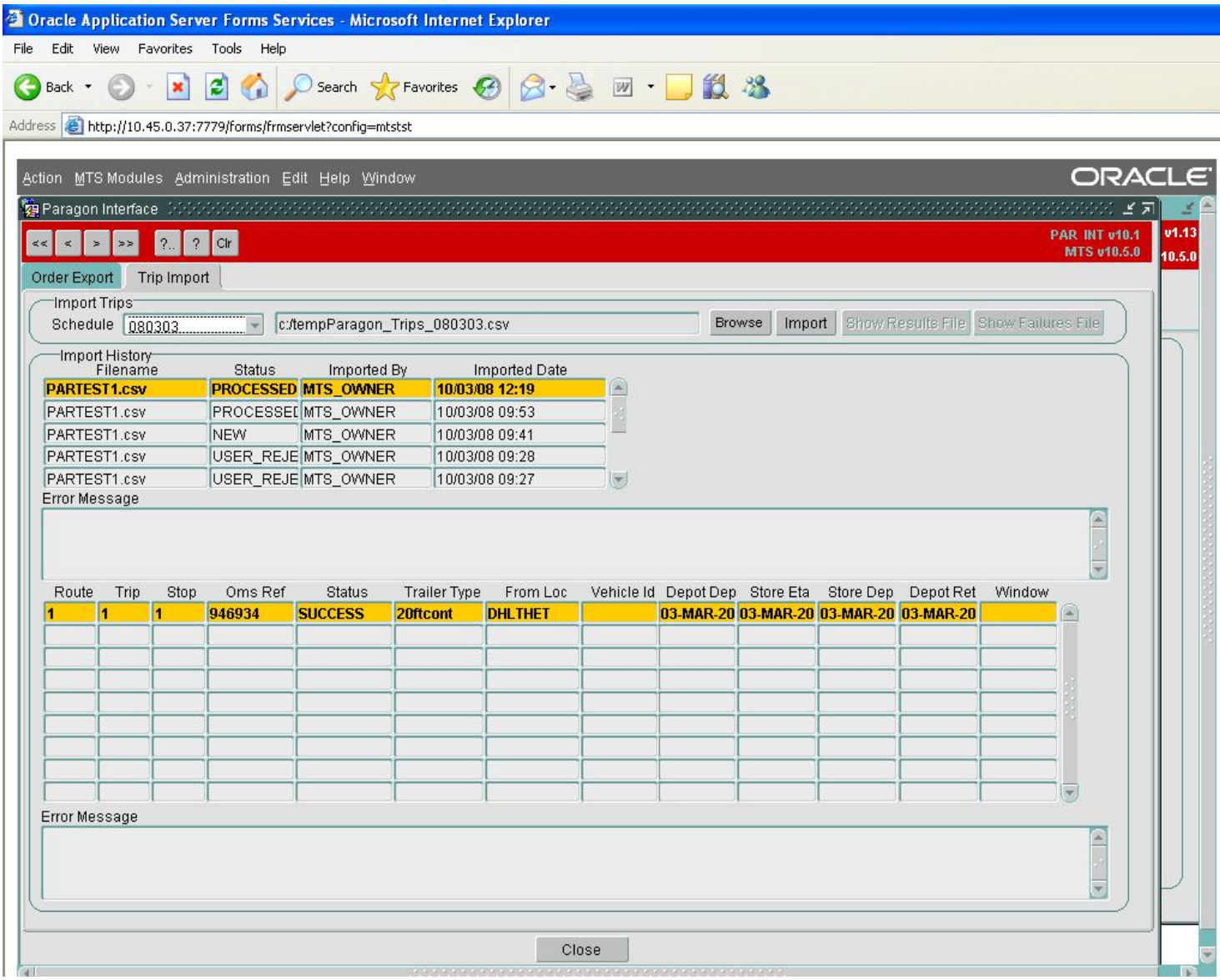


The adjustment that MTS will need to make to the arrival time if a break is noted in the 2nd new column should make all breaks uniform.

The validate trip routine is currently called after every new order is added to the trip to ensure that the trip is still valid (RPE quantities not exceeded etc.) but an additional call to this routine will be added once all of the times have been overwritten to ensure that the trip is still valid as far as the MTS system is concerned.

## 5.3 Par_Int Changes

The Paragon Interface Form will be changed to display these times received from Paragon and uploaded into the intermediate table.




Additionally, the two driver breaks fields will be displayed.

# 6 Document History

| Version | Date | Status | Reason | Initials |
|---|---|---|---|---|
| 1a | 10/03/08 | Draft | Initial version | DRM |
| 1 | 10/03/08 | Issued | Issued after review | DJM |
| 2 | 11/03/08 | Issued | Further requirements | DJM |





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