|  |
| --- |
| Close-up image showing the leaf-sides of two oversized books side-by-side on a bookshelf, with additional books in soft focus background |
| BCD Travel  FTMS-Etravel Integration Specification |
| |  |  |  | | --- | --- | --- | | Ronney Nandakumara | [Date] | [Course title] | |

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# System Architecture

## Database Credentials for the Restricted Access and the Oracle DB Version

Please note the Synonym User Credentials as below;

 User Name: FTMS\_ETRAVEL

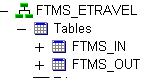
Password: ftms\_etravel\_17062020

SID: BCD

Database: Oracle 10g R2 Version - 10.2.0.4.0

## Database Objects Created for Data Handling

The Tables that you have access are as follows;



## Data Structures

FTMS\_IN Table Data Structure

 ftms\_etravel\_type          VARCHAR2(3) NOT NULL,

ftms\_etravel\_date          DATE NOT NULL,

ftms\_etravel\_dataline      VARCHAR2(500),

ftms\_etravel\_pick\_flag     VARCHAR2(1)

FTMS\_OUT Table Data Structure

 ftms\_etravel\_type          VARCHAR2(3) NOT NULL,

ftms\_etravel\_date          DATE NOT NULL,

ftms\_etravel\_dataline      VARCHAR2(500),

ftms\_etravel\_pick\_flag     VARCHAR2(1)

## Public IP Connection – Proposed Communication Architecture

Public IP : 197.248.217.234

Port Number 3380

Domain : HTL-SAFCOMTOURS

User Name : FTMS\_ETRAVEL

Password : gedara\_\*!2020

## Transported Data Security (Encryption Methodology)

I need the Data Encryption Logics that you will be using to encode and decode data and the provider of such encryption platform

05/07/2018 – Private key to be delivered by FTMS SSL 256 Encryption

## Sample Data Dumping for Testing

Data Line is Pipeline Delimited and the data line contents I will send you ASAP, kindly confirm the connection possibility. If you are able to connect, you may dump any sample data, so that we can clean them.

# Data Insertion Table – Incoming Data for eTravel accounting from FTMS

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Seq** | **Field Effect** | **Data Column** | **Field Type** | **Field Size** | **eTravel** | **FTMS** | **Remarks** | **Sample Value** |
| 1 | Read Note A01 | Number | Vrachar2 | 20 | Auto Generated | No Action | FTMS No Action, ID will generate automatically | **M003036828** |
| 2 | NA | Location | Number | 02 | Validate Only | Send | FTMS will send the 03 as the Location Code | 03 |
| 3 | NA | Sales Branch | Number | 02 | Validate Only | Send | FTMS will send 03 as the Sales Branch | 03 |
| 4 | Accounting Field – No Impact | Sales Date | Date | 11 | Validate Only | Send | Send Sales Date in DD-MMM-YYYY Template (Size should be 11 Characters with indicated delimiter | 25-JAN-2018 |
| 5 | Accounting Field – No Impact | Currency | Varchar2 | 03 | Validate Only | Send | Send currency code in 3 Characters, limited to KES and USD only, Always Uppercase | USD |
| 6 | No Impact | Travel Date | Date | 11 | Validate Only | Send | Send Pick Up Date in DD-MMM-YYYY Template (Size should be 11 Characters with indicated delimiter | 26-JAN-2018 |
| 7 | Act Element : Read Note B-01 | Control Number | Varchar2 | 240 | Validate Only | Send | Send Voucher Number converted to Character | 61348 |
| 8 | No Impact | Sales Type | Varchar2 | 10 | Validate Only | Send | Constant “TRANSFER” should be included, Always Uppercase | TRANSFER |
| 9. | No Impact | Pax Name | Varchar2 | 75 | Validate Only | Send | Send Passenger Name, always Uppercase | DAVID/RUTHO |
| 10. | Key Accounting Element | Customer 1 | Varchar2 | 10 | Validate Only | Send | Send the Mapped Customer Code, always in Uppercase | C0075 |
| 11. | NA | Booking Clerk | Varchar2 | 10 | Validate Only | Send | Send the 2 Letter Mapped Code, all Uppercase | RK |
| 12. | NA | Executive | Varchar2 | 10 | Validate Only | Send | Send the 2 letter mapped code, all in Uppercase | RK |
| 13. | Key Accounting Element | Agent Code | Varchar2 | 10 | Validate Only | Send | Send the Supplier Mapped Code, Uppercase | KBR613 |
| 14. | Key Accounting Element | Selling Fare | Number |  | No Validation | Send | Send the Total Cost for the Booking as a Number | 2200 |
| 15. | No Impact | Remarks | Varchar2 | 240 | No Validation | Send | Send below data  Pickup Loc: *The Pickup Location*  Drop Off Location : *The Drop Off Location*  Car Type : *Car Type from FTMS*  *Joined together in One line/row delimiter Space* | **From** JKIA **To** Hilton Nairobi – Saloon Car |
| 16. | Key Accounting element | Settlement Mode | Varchar2 | 10 | Decode | Send | All Bookings will be dropped as CREDIT | CREDIT |
| 17. | Key Accounting Element  Read Note C01 | LPO Number | Varchar2 | 50 | No Validation | Send | Send the Authorization code from FTMS | 256432 |
| 18. | Accounting Element | LPO Date | Date |  | No Validation | Send | Send the LPO Date from FTMS | 22-JAN-2018 |
| 19. | Accounting Element | Booking Status | Varchar2 | 1 | No Validation | Send | Send the Booking status O- Opened/Created, D-Driver Assigned, C – Completed, X-Cancelled, M-Modified (Wherever Booking Data Modified) | O |

# Global Clients Data Capture Procedure – 05 / 07/2018 Not Completed – Fred has mentioned that this is accommodated in the system, and he will send the sample data to ftms\_in table

Data Line comes from FTMS under the Authorization code contains the Global Data Components delimited with Backslash (‘/’)

Example case

24043 / 116 / 028 / TR / 3174329

1. (B) (C) (D) (E)

(A). Cost Centre

(B). Project Number

(C). Department Number

(D). Trip Purpose

(E). Employee Number

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Seq** | **Field Effect** | **Data Column** | **Field Type** | **Field Size** | **eTravel** | **FTMS** | **Remarks** | **Sample Value** |
| 20. | NA | Cost Centre |  |  | NO Validation | Send | Use the delimiter “/” to segregate the values to each column and then send to the FTMS\_IN Table  If Any element is missing the record will be coming appropriately as below with missing having null  24043 / 116 / / TR / 3174329  In Above line Department Number is missing and hence; it comes as null there, but the delimiter still there to identify the case | 24043 |
| 21. | NA | Project Number |  |  | NO Validation | Send | 116 |
| 22. | NA | Department Number |  |  | NO Validation | Send | 028 |
| 23. | NA | Trip Purpose |  |  | NO Validation | Send | TR |
| 24. | NA | Employee Number |  |  | NO Validation | Send | 3174329 |

# Note – A00 - Record Validation Process 05 / 07/2018 Not Completed

If Validation fails on eTravel, then send the record to an exception table with remarks, user should be able to select such records and then transmit to live table after corrections, please refer to the table under the exception reasons to indicate the exception reason codes. Additionally there will be a remarks column for the exception generated by eTravel as well.

After sending the data record for a Booking in FTMS, if any change takes place, send a subsequent data record again with the same Control Number

# Note – A01 – Ticket Number

Action Party – eTravel

Sender - FTMS

Subject: If a duplicate record comes, what action should be taken?

How do we identify the Duplicate record, there will be a similar record with the same Control Number in system, if the record has been passed to the eTravel Bookings and if not accounted, then perform an update on eTravel Ticket Table and the FTMS\_In Table to denote the record has been updated with the change

If the Record is accounted in eTravel and a modified record comes in, then place it in an exception table to notify that a Duplicate record comes in and cannot be updated as the record is invoiced with Invoice number.

The Records that are not updated, lying in the exception table, should be able to retransmit by the user to Ticket Details table in eTravel, as per the business requirement, BCD will take decision to reverse the invoice and make the correction.

# Note – B01 – Control Number

**Identified as the Key Accounting element**

If a duplicate record comes in with the status of ‘CANCELL’, then

If the Record has been invoiced already by eTravel

Then

Put the record in exception table with the notification number, insert the Exception Record Key Indicator as in table

Else

Cancel the record in eTravel (Void), Put the Void data in to Void Ticket Table

If the Record not found in the FTMS-IN Table previously inserted, then insert in eTravel and then update the Flag in FTMS-IN table to notify that the record has been picked up

# Note C01 – LPO Number

If the left (LPO Number,3)=’BRV’, then change the settlement mode as CREDIT and Customer code select description from the Common Code Master for Cash Customer Account defined there on under the Type STANDCUST as CASHCUST Code

In case if the LPO Number does not come in this field, i.e. if such is blank, then place the LPO as PENDING.

# Exception Record Key Indicator Table Used by ETravel

|  |  |
| --- | --- |
| RC | Record Has been Cancelled in FTMS, but already Accounted in eTravel |
| VF | Validation Failure |

Please Keep provision here to update the Reason Codes using common Code Master or other form.

# A Sample Data Line from FTMS

A Sample Data Line from FTMS will look like below;

**M003036828|03|03|25-JAN-2018|USD|26-JAN-2018|61348|TRANSFER|DAVID RUTHO|C0075|RK|RK|KBR613|2200| FROM JKIA TO HILTON NAIROBI – SALOON CAR|CREDIT|256432|22-JAN-2018|O|24043|116|028|TR|3174329**

# Etravel Outgoing Data

## Customer Master Data

Transmitted Data

Type: ARM – Stands for AR Master / Customer Master

Date: AR Created or Modified Date comes in 22-JAN-2018 Format

Data line: AR Code|AR NAME|AR Status: will be populated in each stage of action as below;

Upon Creating New Customer – FTMS may create the Customer and then update the mapping field with the eTravel Customer Code

The New Mapped AR Code for the Customer Master should be a Unique Filed and there should no be any duplicate data thereon.

Upon Updating of a Customer – The Requirement is to change the Customer Name and the Status only.

Status Flags will contain as below;

N - Normal or Active Customer (is active status in FTMS Y)

B – Blacklisted Customer – where no new bookings will be possible after changing immediately, but the previous bookings done can be completed (is active status in FTMS N)

R – Receipts Only State – Same as Blacklisted Customer - (is active status in FTMS N)

Pick Flag: N by default, upon picking you may change to Y

FTMS will need to change the Transport Voucher now to show the New Mapped Customer Code and Name.

FTMS to add a new Customer for Cash Customers as C0075, All Cash sales should come with this data line.

Once the system is implemented, creation of Customer accounts at FTMS will be suspended.

## Supplier Master Data

Transmitted Data

Type: APM – Stands for AP Master / Supplier Master

Similar to the Customer Master Data

Mapped Supplier code should be Unique field and there should o be any Duplicate fields.

Once the system is implemented, creation of Supplier accounts at FTMS will be suspended.

It was identified that there is no Supplier Code defined for the Own Vehicles, this concept need to be changed in order to accommodate the supplier code for the own vehicles as well.

For Own vehicles there should be a supplier mapping code and BCD will provide the same mapping code for each vehicle once FTMS provide the list.

At the Booking Creation stage it is not mandatory to get the supplier, it can be made mandatory at the level of assigning a driver / car to the booking. Hence the Table will not have a required supplier, but the form will have the same.

## Booking/Travel Consultant Master Data

Similar to the Other Masters except the Type is TCM – Travel Consultant Master (In FTMS User Master) TC Code should be Unique in FTMS User Data Mapped Fields.

## Asset Master Data

Similar to the Other Masters except Type code as FAM stands for Fixed Asset Master. eTravel will only transmit the Asset having the class as Motor Vehicles with the Asset Code and the Asset Name and Status in Boolean Data Type. FTMS to ad a new Unique Mapping Code in their asset masters.

FTMS to send BCD the Complete list of assets in system for BCD to provide the Mapping Codes.

FTMS will stop creating of new assets in system after go live, But due to industry required data fields will allow the users to modify / update data except the asset code and the asset name, asset status.

# Master Data of FTMS

FTMS to give the Master Data for the below Masters for BCD to provide the mapping Details as a onetime exercise. Once this is done, then updates can happen on the fly.

The Below Master Data is required from FTMS

Customer Master

Supplier Master

Asset Master

Booker/ Consultant Master

21st May 2018

1. Location

Fred will send the Location Master, agree in creating a mapping field, BCD will provide the mapping data for each location to integrate in the FTMS

So in interface table (FTMS\_IN) the Location code will come as the Mapped Field in the Location master of FTMS

1. Branch

FTMS Department master will be used as the Branch, so the mapping process needs to be done, Fred will send the Department Master List to BCD

1. Customer Master Mapping

Fred will send the Customer master from FTMS, BCD to give the mapping codes, Once mapping is done, FTMS will stop customer master creation

Customer Creation on FTMS, will be blocked for Transport team, it will be created by the Head office assigned staff wef 01st June 2018

Ronney to send the Users details to create the access.

1. User Master, Agent Master

Fred to send the list of the Users and the Agents/Suppliers for BCD to give the mapping codes

1. LPO Date

To be added in data tables and on the form

1. Global Data

To be created in FTMS Platforms.

Meeting on 27th March 2019

Attendees: Paul and Stephan, Fred on Conference call

1. Office Code and Organization differed – Audit Report every week
2. Remove from Transport Office the Organization (Customer), Supplier and User Codes
3. When a User is moving from One Office to Other Office, is not updated in the system
4. Add Ronney to the Level of Super Admin from Consultant
5. When an Office is Changed system creates a log file, Stephan supposed to grant Ronney the Permission to view the logs
6. There is an very serious upgrade going on, on FTMS Solution, but on a different domain, so now Tony is validating now Fleet and asset management
7. Workshop Module, HR Module – To Be Discussed
8. Booking Clerk and the Sales Executive to be same and agreed to change the system
9. Booking History on Suppliers to be checked
10. Supplier Code Updating and checking whether it is been put on Integration Table

alter table ftms\_etravel.ftms\_in add columns

(

Tkt\_no Varchar2(20),

Location Varchar2(10),

Sales\_Branch Varchar2(10),

sales\_date Date,

Currency Varchar2(10),

Travel\_date date,

control\_Number Varchar2(240),

sales\_type Varchar2(10),

pax\_name Varchar2(75),

customer\_1 Varchar2(10),

booking\_clerk Varchar2(10),

Executive Varchar2(10),

Agent\_code Varchar2(10),

Selling\_fare Number,

Remarks Varchar2(240),

Settlement\_Mode Varchar2(10),

LPO\_Number Varchar2(50),

LPO\_Date Date,

Booking\_Status Varchar2(1),

Cost\_Centre Varchar2(240),

Project\_Number Varchar2(240),

Department\_Number Varchar2(240),

Trip\_Purpose Varchar2(240),

Employee\_Number Varchar2(240)

)