

**ETL from OSS TO RPA V0.5**

**Software Architecture and design Document**

Version 0.5

1/11/2022

# Table of Content

[Table of Content 2](#_Toc149713594)

[1. Introduction 4](#_Toc149713595)

[1.1. Purpose 4](#_Toc149713596)

[1.2. Scope 4](#_Toc149713597)

[1.2.1. In Scope 4](#_Toc149713598)

[1.2.2. Out of Scope 4](#_Toc149713599)

[1.3. Intended Audience 4](#_Toc149713600)

[1.4. Reference Materials 4](#_Toc149713601)

[1.5. Definitions and Abbreviations 4](#_Toc149713602)

[2. Software Overview 4](#_Toc149713603)

[3. Architecture 4](#_Toc149713604)

[3.1. Architecture Overview 4](#_Toc149713605)

[3.2. Architecture Components 5](#_Toc149713606)

[3.3. System Environment and Constraints 5](#_Toc149713607)

[3.4. Architecture Decisions 5](#_Toc149713608)

[4. Software Design 5](#_Toc149713609)

[4.1. Design Overview 5](#_Toc149713610)

[4.2. Design Rationale 7](#_Toc149713611)

[4.3. Solution Impact 7](#_Toc149713612)

**Review History**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Ver. No | Release Date | Implemented by | Approved By | Reviewed by | Reason for new version |
| 0.1 | 01-11-2023 | Mohamed Ibrahim |  |  | Creating initial draft |
| 0.2 | 01-11-2023 | Mohamed Ibrahim |  |  |  |
| 0.4 | 22-11-2023 | Mohamed Ibrahim |  |  | Update SDD To replace KAM: with Free Space |
| 0.5 | 29-11-2023 | Mohamed Ibrahim |  |  | Remove e-matrix validation and add the last update date validation |
| .6 | 3-12-2023 | Mahmoud Gamal |  |  | Add last update date in target table |

# Introduction

## Purpose

The purpose of the document is to provide the technical solution to cashback promo

## Scope

This document will include the design details for changes that will be carried out on existing systems to match the target design

## In Scope

## Out of Scope

## Intended Audience

The document is mainly targeting the staff involved in CRs solution including but not limited to: business analysis, CR management, software development and testing teams. It also serves as a high-level description of the solution for the business stakeholders.

## Reference Materials

## Definitions and Abbreviations

# Software Overview

N/A

# Architecture

## Architecture Overview

N/A

## Architecture Components

* OSS
* RPA
* E-Matrix

## System Environment and Constraints

*N/A*

## Architecture Decisions

*N/A*

# Software Design

## Design Overview

1. Create ETL to transfer the finished Survey orders from OSS to the RPA Database to enable RPA call KAM order management system

**Source Query** : SELECT

CABIN\_NUMBER,BOX\_NUMBER,CUSTOMER\_NAME,t.INSTALL\_ADDRESS9,t.phone\_number, Replace(t.INSTALL\_ADDRESS9,’KAM:’,’’), AREA\_CODE, CREATEDATE, last\_update\_date

FROM T\_BPM\_FORM\_INFO t WHERE

t.current\_state not in('2' , '6' ) and( FCC\_EXCHANGE\_CODE is not null and CABIN\_NUMBER is not null and BOX\_NUMBER is not null)

and t.INSTALL\_ADDRESS9 like 'KAM%'

and to\_date(LAST\_UPDATE\_DATE) >=sysdate()- interval ‘30’ minutes

order by create\_time desc

Note:

that if there some minor issue like forget letter or syntax is not correct proceed with right if achieve the same meaning

**Destination Table :** FTTH Availability Table

|  |  |
| --- | --- |
| **ETL Colum** | **RPA Column Mapping** |
| CABIN\_NUMBER | Passive cabin |
| BOX\_NUMBER | Passive box |
| CUSTOMER\_NAME | Corporate account |
| t.INSTALL\_ADDRESS9 | KAM order id |
| CREATEDATE | ORDER CREATION DATE |
| AREA\_CODE+phone\_number | Assigned BSS phone number |
| Last\_update\_date | Last\_update\_date |

1. Create another ETL to transfer the Completed Orders from the OSS to RPA to call UNMS to activate the data of this subscriber

**Source Query** : SELECT T.area\_code,t.phone\_number, Replace(t.INSTALL\_ADDRESS9,’KAM:’,’’), CABIN\_NUMBER, BOX\_NUMBER, CPE\_SN,last\_update\_date  
 FROM T\_BPM\_FORM\_INFO t WHERE

t.current\_state in(2) and( FCC\_EXCHANGE\_CODE is not null and CABIN\_NUMBER is not null and BOX\_NUMBER is not null)

and t.INSTALL\_ADDRESS9 like 'KAM%'

and to\_date(LAST\_UPDATE\_DATE )>=sysdate()-(1/24)

order by create\_time desc;

**Destination Table :** FTTH Completed FV Orders Table

|  |  |
| --- | --- |
| **ETL Columns** | **RPA** |
| t.INSTALL\_ADDRESS9 (KamOrderID)(OSS) | KAM order id |
| CABIN\_NUMBER | Passive cabin |
| BOX\_NUMBER | Passive box |
| CPE\_SN | Assigned ONU |
| city\_code | City\_code |
| Phone\_number | Phone\_number |
| Last\_update\_date | Last\_update\_date |

## Design Rationale

*N/A*

## Solution Impact