**Interface Specification – McLaren WiFi VTWC**



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## Version Control

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Version History** | | | | |
| Version | Description | Changes | Issued by | Issue date |
| 1.0 | Initial version |  | Juanjo Diaz | 2018-10-04 |

# Executive Summary

## Objectives

This document is to be used to record specification for McLaren WiFi data feed.

The aim of this document is to provide an agreed specification of the source feed such that allows source system personnel to design, develop and deliver the requested solution. The document should also allow Merkle CRM team to understand the content, the structure and the delivery of the source feeds.

*Please notice that this documented is intended to represent the current feed specification, which may be subject to change as the design, development and delivery of the feed continues.*

## Intended Audience

The information provided here is intended primarily for developers of the source system(s) and CRM Merkle data store developers, but can be used as a source of reference for the data store testing or support personnel. It is expected that the technical audience, will have knowledge of the underlying technologies and principles used within the analysis, design, development and delivery of the Source Feed to the CRM Data Store i.e. relational databases, querying of data and importing/exporting data.

# Data Feed Specification

This form is to be completed by the Source System Delivery personnel and VTWC Project Team

## Business description of the Data Feed requests

McLaren WiFi is a wi-fi service provided by Virgin Trains for their users. Providing this service Virgin Trains has the ability to recognise customers and individuals as well as collecting some additional data detailed on further sections of this document.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| Source System Name | | | Virgin Media | | | | | |
| Source Feed Name | | | McLaren - WiFi | | | | | | | |
| Feed request summary | | | | | | | | | | |
|  | | | | | | | | | | |
| Feed request name | | | McLaren WiFi | | | | | | | |
| Description | | | TBC | | | | | | | |
| Contact details for the Data Feed | | | | | | | | | | |
|  | | | | | | | | | | |
| Contact Name | Source or CRM | | Responsibility | Telephone Number | Email Address | Contact Level | |
| TBC | Source | | Representative | TBC | TBC | Primary/Secondary | | | | |
| Merkle Support | CRM | | Support | TBC | TBC | Primary | | | | |
| Juanjo Diaz | CRM | | Interface owner | 07477012265 | [jdiaz@merkleinc.com](mailto:jdiaz@merkleinc.com) | Secondary | | | | |
| Delivery File | | | | | | | | | | |
|  | | | | | | | | | | |
| Delivery frequency | Description | File Name | | Delivery Method | Delivery Location | | | | | |
| Daily Basis | Once per day Virgin Media will upload a file to VTWC Merkle SFTP. | VIRGIN\_TRAINS\_CTYYYYMMDD.csv | | SFTP | Location: [TBC]  Port: [TBC] Path: [TBC] List/Range of IP addresses for Comet to white list: [TBC] **Staging:** [TBC] **Production:**  [TBC] | | | | | |
| Notification of issues with the feed delivery/communication | | | | | | | | | | |
|  | | | | | | | | | | |
| Contact Name | Preferred Method of Communication | | Telephone Number | Email Address | Exceptions / Rules | Endpoint name | Contact Level | | |
| TBC | TBC | | TBC | TBC | TBC | TBC | TBC | | |
| Notification of issues with the feed content | | | | | | | | | | |
|  | | | | | | | | | | |
| Contact Name | Preferred Method of Communication | | Telephone Number | Email Address | Exceptions / Rules | Endpoint name | Contact Level | | |
| TBC | TBC | | TBC | TBC | TBC | TBC | TBC | | |

Other considerations:

SFTP connections will be stablished using a different key authentication per environment.

Public key for staging:

[TBC]

Public key for prod:

[TBC]

# Data feed requirements – Reference

This section provides details of the data feed exported from the business system and the requirements related to the delivery and format of the data feed.

## Business Description of the Data Feed

* A supply of prospect/customers email.
* Update individual and customers marketing preferences

# Data mapping and table definition

This section contains information about new tables created to integrate Mclaren WiFi data as well as the mapping and process used to accommodate that data on Staging tables.

## Data Load Process

On daily basis, McLaren will upload daily deltas files to Merkle SFTP. On an agreed time of the day, an SSIS package will read and load that file to CRM PreProcesssing tables. Then a second process will detect if the provided data belongs to customers or individuals and update the relevant tables on the Staging schema.

This document does not describe how SSIS package should load files into PreProcessing.

## Data Load Process Diagram



**Un-existing record**

If the process is unable to match an email address against Staging.STG\_ElectronicAddress table, it means that we’ve detected a new Individual. It needs to be created on Staging.STG\_Individual, Staging.STG\_ElectronicAddress, Staging.STG\_KeyMapping, Staging.STG\_Address and Staging.STG\_IndividualPreferences.

**Existing record**

If the process can match an email address it will detect if it is an Individual or Customer record.

Individual:

Existing individuals will update “General Marketing Opt-in” flag for that individual on Staging.STG\_IndividualPreference accordingly with provided values.

If Name or Surname are empty on Staging.STG\_Individual table we will update them using provided values.

Customer:

Existing customer will update “General Marketing Opt-in” flag for that customer on Staging.STG\_CustomerPreference accordingly with provided values.

**No other customer data will be modified during that process.**

Once the process is completed, processed rows will be flagged as IsProcessed = 1.

## Tables

In red: Columns not used by this process.

For existing records matching is based on IndividualID or CustomerID found from Staging.STG\_ElectronicAddress.IndividualID or CustomerID where PreProcessing.McLaren\_WiFi.UserID **=** Staging.STG\_ElectronicAddress.ParsedAddress if not null, but if it is null then use Staging.STG\_ElectronicAddress.Address, and AddressTypeID = Reference.AddressType.Name = Email. We’ll try to populate KeyMappingID from Staging.STG\_KeyMapping.KeyMappingID table based on IndividualID or CustomerID found from Staging.STG\_ElectronicAddress.IndividualID or CustomerID.

**PreProcessing.McLaren\_WiFi**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Name** | **PK** | **Date Type** | **NULL?** | **DEFAULT** | **Comments** |
| McLaren\_WiFi\_ID | TRUE | int | NO | IDENTITY(1,1) | Unique autonumeric identifier. |
| TransactionDateTime | FALSE | datetime | YES |  | When this transaction happened |
| DeviceID | FALSE | nvarchar(30) | YES |  | Hashed MAC Address |
| UserID | FALSE | nvarchar(100) | YES |  | User email |
| Title | FALSE | nvarchar(20) | YES |  | User title |
| FirstName | FALSE | nvarchar(100) | YES |  | User first name |
| LastName | FALSE | nvarchar(100) | YES |  | User last name |
| MobilePhoneNumber | FALSE | nvarchar(30) | YES |  | User mobile phone number |
| AddressLine1 | FALSE | nvarchar(255) | YES |  | Postal Address Line 1 |
| AddressLine2 | FALSE | nvarchar(255) | YES |  | Postal Address Line 2 |
| City | FALSE | nvarchar(100) | YES |  | Postal Address City |
| Postcode | FALSE | nvarchar(20) | YES |  | Postal Code |
| CountryOfOrigin | FALSE | nvarchar(50) | YES |  | User country of origin |
| Language | FALSE | nvarchar(100) | YES |  | Preferred language |
| MarketingOptInflag | FALSE | nvarchar(20) | YES |  | General Marketing OptIn flag |
| LoyaltyMember | FALSE | nvarchar(30) | YES |  | N/A Always empty |
| DateOfBirth | FALSE | nvarchar(30) | YES |  | User Date of Birth |
| AgeGroup | FALSE | nvarchar(30) | YES |  | User Age Group |
| SiteID | FALSE | nvarchar(30) | YES |  | Virgin Trains NAT ID which translate into RSID |
| Location | FALSE | nvarchar(100) | YES |  | Used to understand if it is Station WiFi or Train WiFi |
| SSID | FALSE | nvarchar(100) | YES |  | Network name |
| ProductName | FALSE | nvarchar(100) | YES |  | Purchased Product |
| Duration | FALSE | int | YES |  | Max duration of a connection |
| PaymentMethod | FALSE | nvarchar(50) | YES |  | If paid always = 'CARD' |
| PaymentAmount | FALSE | nvarchar(50) | YES |  | Amount paid for the service |
| PaymentReference | FALSE | nvarchar(100) | YES |  | Reference code for that payment |
| FlightNumber | FALSE | nvarchar(100) | YES |  | N/A Always empty |
| Destination | FALSE | nvarchar(100) | YES |  | N/A Always empty |
| DeviceDetails | FALSE | nvarchar(2000) | YES |  | Device browser and OS details |
| CreatedDateETL | FALSE | datetime | YES |  | When this rows was loaded |
| LastModifiedDateETL | FALSE | datetime | YES |  | When this row was last modified by the ETL |
| ProcessedInd | FALSE | bit | YES |  | If processed = 1, otherwise =0 |
| DataImportDetailID | FALSE | int | YES |  | Id of the data import (shouldn't be this a FK??) |

**Staging.STG\_Individual**

|  |  |  |
| --- | --- | --- |
| **Inserted columns** | **Data Source** | **Other considerations** |
| Description | McLaren - WiFi Data | Fix value |
| CreatedDate | GETDATE() |  |
| CreatedBy | DataImportDetailID |  |
| LastModifiedDate | GETDATE() |  |
| LastModifiedBy | DataImportDetailID |  |
| SourceCreatedDate | PreProcessing.McLaren\_WiFi.TransactionDate |  |
| SourceModifiedDate | PreProcessing.McLaren\_WiFi.TransactionDate |  |
| DateFirstPurchase | PreProcessing.McLaren\_WiFi.TransactionDate |  |
| DateLastPurchase | PreProcessing.McLaren\_WiFi.TransactionDate |  |
| InformationSourceID | Reference.InformationSource.InformationSourceID (Name = 'McLaren') |  |
| Salutation | PreProcessing.McLaren\_WiFi.Title |  |
| FirstName | PreProcessing.McLaren\_WiFi.FirstName |  |
| LastName | PreProcessing.McLaren\_WiFi.LastName |  |
| YearOfBirth | PreProcessing.McLaren\_WiFi.YearOfBirth |  |
|  |  |  |
| **Updated columns** | **Data Source** | **Other considerations** |
| Description | McLaren - WiFi Data | Fix value |
| Salutation | PreProcessing.McLaren\_WiFi.Title | Only update if current value is empty |
| FirstName | PreProcessing.McLaren\_WiFi.FirstName | Only update if current value is empty |
| LastName | PreProcessing.McLaren\_WiFi.LastName | Only update if current value is empty |
| YearOfBirth | PreProcessing.McLaren\_WiFi.YearOfBirth | Only update if current value is empty |
| LastModifiedBy | GETDATE() |  |
| LastModifiedDate | DataImportDetailID |  |
| InformationSourceID | Reference.InformationSource.InformationSourceID (Name = 'McLaren') |  |
| DateLastPurchase | PreProcessing.McLaren\_WiFi.TransactionDate | Only change this value if PreProcessing.McLaren\_WiFi.  TransactionDate is newest than the current value. |
| SourceModifiedDate | PreProcessing.McLaren\_WiFi.TransactionDate |  |

**Staging.STG\_ElectronicAddress**

|  |  |  |
| --- | --- | --- |
| **Inserted columns** | **Data Source** | **Other considerations** |
| Name | McLarenWiFi | Fix value |
| Description | McLaren - WiFi Data | Fix value |
| CreatedDate | GETDATE() |  |
| CreatedBy | DataImportDetailID |  |
| LastModifiedDate | GETDATE() |  |
| LastModifiedBy | DataImportDetailID |  |
| InformationSourceID | Reference.InformationSource.InformationSourceID (Name = 'McLaren') |  |
| SourceChangeDate | PreProcessing.McLaren\_WiFi.TransactionDate |  |
| Address | PreProcessing.McLaren\_WiFi.UserID |  |
|  | PreProcessing.McLaren\_WiFi.MobilePhoneNumber |  |
| AddressTypeID | Reference.AddressType.AddressTypeID (Name = 'Email') | Create new row for Email |
|  | Reference.AddressType.AddressTypeID (Name = 'Mobile') | Create new row for Mobile Phone number |
| PrimaryInd | 1 | PrimaryInd per Individual per AddressType |
| UsedInCommunicationInd | 1 |  |
| IndividualID | New Individual generated from Individual Insert |  |
| HashedAddress | Staging.VT\_HASH(mw.MobilePhoneNumber) |  |
| EncryptedAddress | NEWID() |  |

*Only for Mobile Phone Number*

|  |  |  |
| --- | --- | --- |
| **Updated columns** | **Data Source** | **Other considerations** |
| Description | McLaren - WiFi Data | New value must be not null |
| LastModifiedDate | GETDATE() | New value must be not null |
| LastModifiedBy | DataImportDetailID | New value must be not null |
| SourceChangeDate | PreProcessing.McLaren\_WiFi.TransactionDate | New value must be not null |
| Address | PreProcessing.McLaren\_WiFi.MobilePhoneNumber | New value must be not null AddressTypeID = Reference.  AddressType.AddressTypeID (Name = 'Mobile') |

**Staging.STG\_Address**

|  |  |  |
| --- | --- | --- |
| **Inserted columns** | **Data Source** | **Other considerations** |
| IndividualID | New Individual generated from Individual Insert |  |
| Name | McLarenWiFi | Fix value |
| Description | McLaren - WiFi Data | Fix value |
| CreatedBy | DataImportDetailID |  |
| CreatedDate | GETDATE() |  |
| LastModifiedBy | DataImportDetailID |  |
| LastModifiedDate | GETDATE() |  |
| SourceCreatedDate | PreProcessing.McLaren\_WiFi.TransactionDate |  |
| SourceModifiedDate | PreProcessing.McLaren\_WiFi.TransactionDate |  |
| AddressLine1 | PreProcessing.McLaren\_WiFi.AddressLine1 |  |
| AddressLine2 | PreProcessing.McLaren\_WiFi.AddressLine2 |  |
| TownCity | PreProcessing.McLaren\_WiFi.City |  |
| PostalCode | PreProcessing.McLaren\_WiFi.Postcode |  |
| InformationSourceID | Reference.InformationSource.InformationSourceID (Name = 'McLaren') |  |
| AddressTypeID | Reference.AddressType.AddressTypeID (Name='Contact') |  |
|  |  |  |
| *Only update if Staging.STG\_Address.SourceModifiedData < PreProcessing.McLarenWiFi.TransactionDate* | | | |
| **Updated columns** | **Data Source** | **Other considerations** |
| AddressLine1 | PreProcessing.McLaren\_WiFi.AddressLine1 | New value must be not null |
| AddressLine2 | PreProcessing.McLaren\_WiFi.AddressLine2 | New value must be not null |
| TownCity | PreProcessing.McLaren\_WiFi.City | New value must be not null |
| PostalCode | PreProcessing.McLaren\_WiFi.Postcode | New value must be not null |
| InformationSourceID | Reference.InformationSource.InformationSourceID (Name = 'McLaren') | New value must be not null |
| SourceModifiedDate | PreProcessing.McLaren\_WiFi.TransactionDate | New value must be not null |
| LastModifiedBy | DataImportDetailID | New value must be not null |

**Staging.STG\_KeyMapping**

|  |  |  |
| --- | --- | --- |
| **Inserted columns** | **Data Source** | **Other considerations** |
| Description | McLaren - WiFi Data |  |
| CreatedDate | GETDATE() |  |
| CreatedBy | DataImportDetailID |  |
| LastModifiedDate | GETDATE() |  |
| LastModifiedBy | DataImportDetailID |  |
| IndividualID | New Individual generated from Individual Insert |  |
| InformationSourceID | Reference.InformationSource.InformationSourceID (Name = 'McLaren') |  |
| IsVerifiedInd | 0 | Not verified |
| IsParentInd | 0 | Not parsed |

**Staging.STG\_IndividualPreference**

|  |  |  |
| --- | --- | --- |
| **Inserted columns** | **Data Source** | **Other considerations** |
| IndividualID | New Individual generated from Individual Insert |  |
| PreferenceID | Reference.Preference.PreferenceID (Name='General Marketing OptIn') |  |
| ChannelID | Reference.Channel.ChannelID (Name='Email') |  |
| Value | PreProcessing.McLaren\_WiFI.MarketingOptInflag |  |
| CreatedBy | DataImportDetailID |  |
| CreatedDate | PreProcessing.McLaren\_WiFi.TransactionDate |  |
| LastModifiedBy | DataImportDetailID |  |
| LastModifiedDate | PreProcessing.McLaren\_WiFi.TransactionDate |  |
|  |  |  |
| **Updated columns** | **Data Source** | **Other considerations** |
| Value | PreProcessing.McLaren\_WiFI.MarketingOptInflag | New value must be not null |
| LastModifiedBy | DataImportDetailID | New value must be not null |
| LastModifiedDate | PreProcessing.McLaren\_WiFi.TransactionDate | New value must be not null |

**Staging.STG\_CustomerPreference**

|  |  |  |
| --- | --- | --- |
| **Inserted columns** | **Data Source** | **Other considerations** |
| CustomerID | Customer found while matching against Staging.STG\_ElectronicAddress.Address where AddressType = Email | | |
| PreferenceID | Reference.Preference.PreferenceID (Name='General Marketing OptIn') |  |
| ChannelID | Reference.Channel.ChannelID (Name='Email') |  |
| Value | PreProcessing.McLaren\_WiFI.MarketingOptInflag |  |
| CreatedBy | DataImportDetailID |  |
| CreatedDate | PreProcessing.McLaren\_WiFi.TransactionDate |  |
| LastModifiedBy | DataImportDetailID |  |
| LastModifiedDate | PreProcessing.McLaren\_WiFi.TransactionDate |  |
|  |  |  |
| **Updated columns** | **Data Source** | **Other considerations** |
| Value | PreProcessing.McLaren\_WiFI.MarketingOptInflag | New value must be not null |
| LastModifiedBy | DataImportDetailID | New value must be not null |
| LastModifiedDate | PreProcessing.McLaren\_WiFi.TransactionDate | New value must be not null |

**Staging.STG\_MclarenWiFiHistory**

|  |  |  |
| --- | --- | --- |
| **Inserted columns** | **Data Source** | **Other considerations** |
| KeyMappingID | Staging.STG\_KeyMapping.KeyMappingID |  |
| McLaren\_WiFi\_ID | PreProcessing.McLaren\_WiFi.McLaren\_WiFi\_ID |  |
| TransactionDateTime | PreProcessing.McLaren\_WiFi.TransactionDateTime |  |
| DeviceID | PreProcessing.McLaren\_WiFi.DeviceID |  |
| CountryOfOrigin | PreProcessing.McLaren\_WiFi.CountryOfOrigin |  |
| Language | PreProcessing.McLaren\_WiFi.Language |  |
| DateOfBirth | PreProcessing.McLaren\_WiFi.DateOfBirth |  |
| AgeGroup | PreProcessing.McLaren\_WiFi.AgeGroup |  |
| SiteID | PreProcessing.McLaren\_WiFi.SiteID |  |
| Location | PreProcessing.McLaren\_WiFi.Location |  |
| SSID | PreProcessing.McLaren\_WiFi.SSID |  |
| ProductName | PreProcessing.McLaren\_WiFi.ProductName |  |
| HasUserPaidForService | If PreProcessing.McLaren\_WiFi.PaymentAmount > 0 THEN 1 ELSE 0 | Calculated Column |
| DeviceDetails | PreProcessing.McLaren\_WiFi.DeviceDetails |  |
| DataImportDetailID | DataImportDetailID |  |