

**Business Requirements Document**

**MCIB Mandatory field UNIQUE\_REF\_ID**

# Document Revisions

|  |  |  |
| --- | --- | --- |
| Date | Version Number | Document Changes |
| 03/03/2022 | 1.0 | BRD finalised |
| 29/03/2022 | 1.1 | Added entity\_type, entity\_code. BRN finalised |
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# Introduction

## Overview

This document aims to understand the process flow where ICPS provides Cim with the daily MCIB XML file to where Cim splits the XML file into several XML files, uploads them and downloads the acknowledgment XML file from BoM’s MCIB Portal. The acknowledgment XML file contains the XML tag UNIQUE\_REF\_ID of the record that has been created at MCIB.

BoM mandates participants to include the UNIQUE\_REF\_ID in the sent MCIB XML file to facilitate and ease record processing.

Cim will combine the several acknowledgment files into a single XML file containing the REF\_NO and its UNIQUE\_REF\_ID. The XML tags ENTITY\_TYPE and ENTITY\_CODE have also been added to ease ICPS processing of identifying a company or individual record.

The XML file will then be zipped password protected and transferred to ICPS’s SFTP. ICPS will then process the file and include the provided UNIQUE\_REF\_ID in the next MCIB XML file.

## Process Flow

Cim program retrieves ICPS XML File

Cim program splits and Cim uploads the XML file(s) onto BoM's MCIB Portal

Cim downloads the acknowledgment file(s) from BoM's MCIB Portal

Cim program will combine the acknowledgment file(s) into single XML file

Cim program will compress the XML file and will upload onto ICPS's SFTP

ICPS will retrieve the zipped XML file and will store the provided values (REF\_ID, UNIQUE\_REF\_ID, …)

ICPS will populate the UNIQUE\_REF\_ID on next batch run

# Sample data

The combined XML file will be named as ACimCddMMYYYY.xml

Below is a sample of the file:

ACimC27122021.xml

<ACK >

<record>

<ENTITY\_CODE>121072</ENTITY\_CODE>

<ENTITY\_TYPE>C</ENTITY\_TYPE>

<REF\_NO>4604587</REF\_NO>

<UNIQUE\_REF\_ID>2018110817267871</UNIQUE\_REF\_ID>

</record>

<record>

<ENTITY\_CODE>C1439</ENTITY\_CODE>

<ENTITY\_TYPE>C</ENTITY\_TYPE>

<REF\_NO>4552382</REF\_NO>

<UNIQUE\_REF\_ID>NOT FOUND</UNIQUE\_REF\_ID>

</record>

<record>

<ENTITY\_CODE>113181</ENTITY\_CODE>

<ENTITY\_TYPE>C</ENTITY\_TYPE>

<REF\_NO>CRD5144974</REF\_NO>

<UNIQUE\_REF\_ID>2020092324180775</UNIQUE\_REF\_ID>

</record>

<record>

<ENTITY\_CODE>A010182140021O</ENTITY\_CODE>

<ENTITY\_TYPE>I</ENTITY\_TYPE>

<REF\_NO>4605035</REF\_NO>

<UNIQUE\_REF\_ID>2017091214504614</UNIQUE\_REF\_ID>

</record>

<record>

<ENTITY\_CODE>A0104733005555</ENTITY\_CODE>

<ENTITY\_TYPE>I</ENTITY\_TYPE>

<REF\_NO>CRD5116956</REF\_NO>

<UNIQUE\_REF\_ID>2021042327161633</UNIQUE\_REF\_ID>

</record>

<!-- filename1="ACimC26122021\_01.xml" filename2="ACimC26122021\_02.xml" filename3="ACimC27122021\_01.xml" filename4="ACimC27122021\_02.xml" recordCount=5 -->

</ACK>

## Action Summary

ICPS has to check the below provided values if exist in the new table:

* Ref\_No
* Unique\_Ref\_ID

The Ref\_No is the shadow account number from table Shadow\_Account.Shadow\_Account\_nbr or is a 7 digits account code stored from table Card.PWRCD\_INTERNAL\_REFERENCE.

ICPS has to perform additional checks on the below provided values:

* ENTITY\_TYPE
  + “I” for Individual
  + “C” for Company
* Entity\_Code
  + The MCIB XML tag Entity\_Code for company record has normally no starting “C” or “P” which stands for Company or Partnership respectively. However, if it does contain the starting “C” or “P”, ICPS should store the value “AS IS” in the new table.Entity\_Code for that particular Ref\_No record.
  + The Entity\_Code value is from table Client.Legal\_ID
  + The additional checks are for the MCIB Entity\_Code against the Client.Legal\_ID:
    - For Individual record, the check should be “AS IS” value
    - For Company record, the Client.Legal\_ID value must have the starting “C” or “P” truncated for the check against the MCIB Entity\_Code

The below table summarised the action to be taken and references:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Ref\_No checks in new table | Unique\_Ref\_ID checks in new table | Entity\_Code against Client.Legal\_ID | Action | Refer to sample | Remarks |
| Not exist | Not exist | Same | Insert record Success report - New | Entity\_Code matched | 1a | Success with remarks "New | Entity\_Code matched" |
| Not exist | Not exist | Different | Insert record Success report - New | Entity\_Code mismatched | 5a | Entity\_Code mismatched also means not found Success with remarks "New | Entity\_Code mismatched" |
| Not exist | Exist | Same | Insert record Success report - New and existing Unique\_Ref\_ID | Entity\_Code matched | 3 | There should be only one Unique\_Ref\_ID but should still insert the record by the Ref\_No. Success with remarks "New and existing Unique\_Ref\_ID | Entity\_Code matched" Refer to sample 3 where Ref\_No for a migrated account has Ref\_No as Shadow account |
| Not exist | Exist | Different | Insert record Success report - New and existing Unique\_Ref\_ID | Entity\_Code mismatched | 5b | Success with remarks "New and existing Unique\_Ref\_ID | Entity\_Code mismatched" Where different Unique\_Ref\_ID, Cim will have to investigate |
| Exist | Exist | Same | Do not insert record Success report - Existing and same Unique\_Ref\_ID | Entity\_Code matched | 1b | As record already exists, should not insert or update record not required. Success with exception remarks "Existing and same Unique\_Ref\_ID | Entity\_Code matched" |
| Exist | Not exist | Same | Do not insert record Reject report - Existing and different Unique\_Ref\_ID | Entity\_Code matched | 1c | In Reject report with remarks "Existing and different Unique\_Ref\_ID | Entity\_Code matched" The record is not updated, Cim will have to investigate |
| Exist | Exist | Different | Do not insert record, update the record by Ref\_No with the latest Entity\_Code Success report - Existing and same Unique\_Ref\_ID | Entity\_Code mismatched - Update entity\_code | 4 | Success with exception remarks "Existing and same Unique\_Ref\_ID | Entity\_Code mismatched - Update entity\_code" as Client.Legal\_ID has been changed, the record has to be updated by the Ref\_No with the latest Entity\_Code value |
| Exist | Not exist | Different | Do not insert record, update the record by Ref\_No with the latest Entity\_Code Reject report - Existing and different Unique\_Ref\_ID | Entity\_Code mismatched | 2, 4, 5c | Where different Unique\_Ref\_ID, Cim will have to investigate In Reject report with remarks "Existing and different Unique\_Ref\_ID | Entity\_Code mismatched" |

## Sample 1a - Migrated Individual Account | Ref\_No and Unique Ref ID not at ICPS (New) and same Entity Code

For migrated individual account to ICPS, the Ref\_No value is the 7 digits account code i.e. 4604587 that is used instead of the shadow account number i.e. VRD0000092.

The 7 digits account code is stored in the table Card’s PWRCD\_INTERNAL\_REFERENCE.

The provided Unique\_Ref\_ID value i.e. 2018110817267871 does not exist at ICPS, the action is to insert the record by Ref\_No and flag the record as success:

|  |  |  |
| --- | --- | --- |
| Ref\_No | Unique\_Ref\_ID | Action |
| 4604587 | 2018110817267871 | Insert record  Success report - New | Entity\_Code matched |

Action Summary

ICPS should insert the record by Ref\_No and store the provided values.

In the success report, the record has the status remarks “Success - New | Entity\_Code matched”.

## Sample 1b - Migrated Individual Account | Ref\_No and Unique Ref ID at ICPS (Already exist, same Unique\_Ref\_ID) and same Entity Code

* If the provided Unique\_Ref\_ID value i.e. 2018110817267871 already exist at ICPS and as the record already exists, the action is to flag the record as success:

|  |  |  |
| --- | --- | --- |
| Ref\_No | Unique\_Ref\_ID | Action |
| 4604587 | 2018110817267871 | Do not insert record as already existing record and same Unique\_Ref\_ID value  Success report - Existing and same Unique\_Ref\_ID | Entity\_Code matched |

Action Summary

ICPS should not insert the record as the record is already existing by Ref\_No.

In the success report, the record has the status remarks “Success - Existing and same Unique\_Ref\_ID | Entity\_Code matched”.

## Sample 1c - Migrated Individual Account | Ref\_No at ICPS (already exist, different Unique\_Ref\_ID) and same Entity Code

If the provided Unique\_Ref\_ID value 2018110817267871 does not exist at ICPS but the Ref\_No 4604587 is existing and has different Unique\_Ref\_ID value stored.

The action is to flag the record in the reject report as follows:

|  |  |  |
| --- | --- | --- |
| Ref\_No | Unique\_Ref\_ID | Action |
| 4604587 | 2018110817267871 | Do not insert record  Reject report - Existing and different Unique\_Ref\_ID | Entity\_Code matched |

Action Summary

ICPS should not insert the record as the record is already existing by Ref\_No.

In the reject report, the record has the status remarks “Reject - Existing and different Unique\_Ref\_ID | Entity\_Code matched”.

## Sample 2 - Migrated Corporate account | Unique Ref ID value “NOT FOUND”, Ref\_No exists and different Entity Code

For migrated corporate account to ICPS, the Ref\_No is the 7 digit account code i.e. 4552382 that is used instead of the shadow account number i.e. 100075377.

The 7 digits account code is stored in the table Card’s PWRCD\_INTERNAL\_REFERENCE.

Only the primary corporate account is reported to MCIB i.e. present in the sent MCIB XML file.

The provided Unique\_Ref\_ID value i.e. “NOT FOUND” is an invalid value and should not be stored.

The provided Entity\_Code has starting value “C” and should match “AS IS” with the Client.Legal\_ID without starting value “C” or “P” as the record is for a company where the provided Entity\_Type = ‘C’.

The action is to flag the record in the reject report as follows:

|  |  |  |
| --- | --- | --- |
| Ref\_No | Unique\_Ref\_ID | Action |
| 4552382 | NOT FOUND | Do not insert record, update the record by Ref\_No with the latest Entity\_Code  Reject report - Existing and different Unique\_Ref\_ID | Entity\_Code mismatched |

Action Summary

ICPS should not insert the record as the Unique\_Ref\_ID and Entity\_Code values are different / mismatched.

Whenever the Unique\_Ref\_ID value is different / has value “NOT FOUND”, the value should not be kept. On next batch run, the XML file for that particular Ref\_No Unique\_Ref\_ID is either null or the value ICPS has.

As the Ref\_No already exists at ICPS and the Entity\_Code is different, ICPS should update with the latest Entity\_Code value for that particular Ref\_No.

In the reject report, the record has the status remarks “Reject - Existing and different Unique\_Ref\_ID | Entity\_Code mismatched”.

## Sample 3 - Migrated account, REF\_NO is Shadow\_Account instead of 7 digit account code | Unique Ref ID exist at ICPS, Ref\_No not at ICPS (New) and same Entity Code

There have been cases where the 7 digit account code has not been sent but instead the shadow account number was sent to MCIB. This happened when a card has been replaced and the replaced card did not have the PWC\_Internal\_Ref\_ID populated.

The Ref\_No with the 7 digit account code 4543582 already has an existing entry at ICPS with the Unique\_Ref\_ID 2020092324180775.

The provided Ref\_No value is instead VRD0153426 with the same Unique\_Ref\_ID value.

|  |  |  |
| --- | --- | --- |
| Ref\_No | Unique\_Ref\_ID | Action |
| VRD0153426 | 2020092324180775 | Insert record  Success report - New and existing Unique\_Ref\_ID | Entity\_Code matched |

Action Summary

ICPS should insert the record by Ref\_No.

In the success report, the record has the status remarks “Success - New and existing Unique\_Ref\_ID | Entity\_Code matched”.

Additional Information – Store by Ref\_No

Even though ICPS has another Unique\_Ref\_ID value stored for the Ref\_No value 4543582 which is linked to the shadow account VRD0153426, ICPS will still store the provided Unique\_Ref\_ID value for the provided Ref\_No value VRD0153426 as this record does not exist in the table.

Most of the cases, the returned MCIB Unique\_Ref\_ID value should contain “NOT FOUND” as the MCIB facility for the shadow account number VRD0153426 exists at MCIB under the Ref\_No value i.e. 4543582.

Rarely, will there be cases where two MCIB records exist for 4543582 and VRD0153426. These are considered as two different records and BoM will return a unique value for each. ICPS will still load as provided.

## Sample 4 - Migrated Individual Account | Unique Ref ID and Ref\_No exist at ICPS and different Entity Code

For migrated individual account to ICPS, the Ref\_No value is the 7 digits account code i.e. 4605035 that is used instead of the shadow account number i.e. CRD0203317.

The 7 digits account code is stored in the table Card’s PWRCD\_INTERNAL\_REFERENCE.

The Entity\_Code is stored in the table Client.Legal\_ID and the record for the sample 4 is an individual one where Entity\_Type = ‘I’.

Action Summary

The provided Entity\_Code A010182140021O does not matched with the table Client.Legal\_ID which is A0101821400210.

As the provided Unique\_Ref\_ID value 2017091214504614 exists at ICPS, the action is not to insert but to update the record by the Ref\_No with the latest Entity\_Code.

In the success report, the record has the status remarks “Existing and same Unique\_Ref\_ID | Entity\_Code mismatched - Update entity\_code”

|  |  |  |
| --- | --- | --- |
| Ref\_No | Unique\_Ref\_ID | Action |
| 4605035 | 2017091214504614 | Do not insert record, update the record by Ref\_No with the latest Entity\_Code  Success report - Existing and same Unique\_Ref\_ID | Entity\_Code mismatched  - Update entity\_code |

If the provided Unique\_Ref\_ID value i.e. 2017091214504614 does not exist at ICPS but the Ref\_No 4605035 is and has different Unique\_Ref\_ID value stored. The provided Entity\_Code does not match against ICPS Client.Legal\_ID value.

Action Summary

ICPS should not insert but update the record by the Ref\_No with the latest Entity\_Code.

In the reject report, the record has the status remarks “Existing and different Unique\_Ref\_ID | Entity\_Code mismatched - Update entity\_code”:

|  |  |  |
| --- | --- | --- |
| Ref\_No | Unique\_Ref\_ID | Action |
| 4605035 | 2017091214504614 | Do not insert record, update the record by Ref\_No with the latest Entity\_Code  Reject report - Existing and different Unique\_Ref\_ID | Entity\_Code mismatched - Update entity\_code |

## Sample 5a - Non migrated account | Unique Ref ID and Ref\_No not at ICPS (New) and different Entity Code

For a non-migrated account which is created on PowerCARD, the REF\_NO value is the Shadow Account Number i.e. CRD5116956.

The provided Unique\_Ref\_ID 2021042327161633 does not exist at ICPS as well as the Ref\_No CRD5116956. However, the provided Entity\_Code A0104733005555 does not match against ICPS Client.Legal\_ID value.

The action is to flag the record in the success report as follows:

|  |  |  |
| --- | --- | --- |
| Ref\_No | Unique\_Ref\_ID | Action |
| CRD5116956 | 2021042327161633 | Insert record  Success report - New | Entity\_Code mismatched |

Action Summary

ICPS should insert the record by Ref\_No and store the provided values.

In the success report, the record has the status remarks “Success - New | Entity\_Code mismatched”.

## Sample 5b - Non migrated account | Ref\_No not exist at ICPS, same Unique\_Ref\_ID and different Entity Code

* If the provided Unique\_Ref\_ID value 2021042327161633 already exist at ICPS but not the Ref\_No CRD5116956 and the provided Entity\_Code A0104733005555 does not match against ICPS Client.Legal\_ID value.

|  |  |  |
| --- | --- | --- |
| Ref\_No | Unique\_Ref\_ID | Action |
| CRD5116956 | 2021042327161633 | Insert record  Success report - New and existing Unique\_Ref\_ID | Entity\_Code mismatched |

Action Summary

ICPS should insert the record by Ref\_No and store the provided values.

In the success report, the record has the status remarks “Success - New and existing Unique\_Ref\_ID | Entity\_Code mismatched”.

## Sample 5c - Non migrated account | Unique Ref ID and Ref\_No exist at ICPS and different Unique\_Ref\_ID

If the provided Unique\_Ref\_ID value i.e. 2021042327161633 does not exist at ICPS but the Ref\_No CRD5116956 is existing and has different Unique\_Ref\_ID value stored, the action is to flag the record in the reject report as follows:

|  |  |  |
| --- | --- | --- |
| Ref\_No | Unique\_Ref\_ID | Action |
| CRD5116956 | 2021042327161633 | Do not insert record, update the record by Ref\_No with the latest Entity\_Code  Reject report - Existing and different Unique\_Ref\_ID | Entity\_Code mismatched |

Action Summary

ICPS should not insert the record as the record is already existing by Ref\_No.

In the reject report, the record has the status remarks “Reject - Existing and different Unique\_Ref\_ID | Entity\_Code matched”.

# Requirement

Cim requires ICPS to store the MCIB Unique\_Ref\_ID and populate it in the daily XML MCIB file.

The provided XML tags values for Ref\_No, Entity\_Type, Entity\_Code are to be stored to facilitate ease of retrieval and for reporting.

# Controls

## SFTP File upload from Cim to ICPS

Once Cim downloads the MCIB acknowledge files and combines them into a single XML file.

Cim shall create the folder and upload only a single compressed password-protected file to ICPS SFTP.

ICPS will then process the file before the daily batch run.

Note that there should be no dependency on whether Cim uploads the file or not. Cim will not upload after 22:00. In such case, Cim will then combine the missed/past single XML file into the next file and uploads only a single compressed password-protected file to ICPS SFTP.

## Correct Unique\_Ref\_ID and Ref\_No

ICPS shall ensure the correct Shadow Account Number is being updated with the provided Ref\_No which can be the shadow account number from table Shadow\_Account.Shadow\_Account\_nbr or a 7 digits account code from table Card.PWRCD\_INTERNAL\_REFERENCE.

The Unique\_Ref\_ID may contain the value “NOT FOUND” and should not be processed.

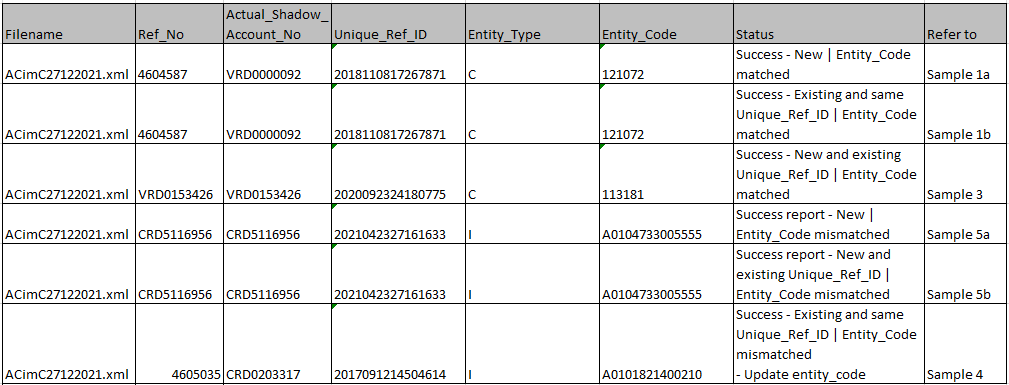
## Daily RAW JSON File

ICPS shall provide Cim with the new table storing the provided values via the ICPS SFTP daily RAW JSON file.

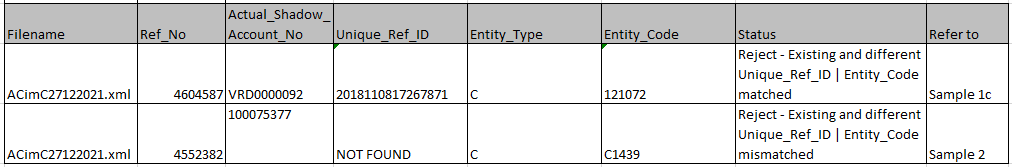
## Report

ICPS shall send two notification reports based on Success and Reject via the ICPS SFTP daily report folder, in the sub folder “MCIB\_REPORTS”. The format should be in Excel comma separated csv and as follows:

### Success Report + count/detail



### Reject Report + count/details



# UAT Testing - Test Data

Cim requires ICPS to test for the mentioned scenarios before going live.

Test data sheet, XML files and expected result

|  |  |  |  |
| --- | --- | --- | --- |
| Ref\_No checks in new table | Unique\_Ref\_ID checks in new table | Entity\_Code against Client.Legal\_ID | Expected Result |
| Not exist | Not exist | Same | Insert record Success report - New | Entity\_Code matched |
| Not exist | Not exist | Different | Insert record Success report - New | Entity\_Code mismatched |
| Not exist | Exist | Same | Insert record Success report - New and existing Unique\_Ref\_ID | Entity\_Code matched |
| Not exist | Exist | Different | Insert record Success report - New and existing Unique\_Ref\_ID | Entity\_Code mismatched |
| Exist | Exist | Same | Do not insert record Success report - Existing and same Unique\_Ref\_ID | Entity\_Code matched |
| Exist | Not exist | Same | Do not insert record Reject report - Existing and different Unique\_Ref\_ID | Entity\_Code matched |
| Exist | Exist | Different | Do not insert record, update the record by Ref\_No with the latest Entity\_Code Success report - Existing and same Unique\_Ref\_ID | Entity\_Code mismatched - Update entity\_code |
| Exist | Not exist | Different | Do not insert record, update the record by Ref\_No with the latest Entity\_Code Reject report - Existing and different Unique\_Ref\_ID | Entity\_Code mismatched |