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Interface Design Document

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# Introduction

## Purpose and Scope

This document provides the reader with detailed interface agreement specifications for integrating Amdocs Engage (AIA) with PLDT CVM for Two Ways SMS responses information. The document provides all the information required to estimate the work and the tasks to realize this interface.

## Related Documentation

The following documents will assist the reader in obtaining a broader understanding of the subject-matter of this document:

| DC# | Document Name |
| --- | --- |
| 3654050 | PLDT - Trident - PLDT 3C3 AIA HLD |

## Terms and Definitions – N/A

Following is a list of terms used in this document, with which the reader should be familiar:

| Term/Acronym | Definition |
| --- | --- |
|  |  |

# General Information

## Technical Information

|  |  |
| --- | --- |
| **Phase:** | Project 3c |
| **Amdocs Product:** | Amdocs Engage |
| **Amdocs Provider:** | Engage |
| **External System Consumer:** | CVM |
| **Type of Integration:** | File |
| **Interface Type:** | File Transfer |

## SOW Traceability Matrix – N/A

| S. No | SOW Section | IDD Section | Description |
| --- | --- | --- | --- |
|  |  |  |  |

## Requirements Traceability Matrix – N/A

| Requirement ID | Requirement Description | IDD Section |
| --- | --- | --- |
|  |  |  |

## Interface Master List Traceability Matrix

| S. No | IML ID | IML Description | IDD Section |
| --- | --- | --- | --- |
|  | AIA200 | Two ways SMS responses | All |

# Two ways SMS responses extracts generation

## File extracts

### Description

Engage supports two ways SMS for prepaid subscription, postpaid subscription and home subscription.

The SMS response is handled by one of the following methods:

* Engage performs the required operation for the responding subscription.
* CVM performs the required operation for the responding subscription, based on Engage response information.

This interface automates the way by which the responses information from Engage is published to CVM. This will substantially decrease the time between the response and performance of the required operation in case of operation to be performed by CVM.

 Note: The opt-in code of an experience is unique within the system. This mean that generic codes such as “Yes” and “No” could be used as opt-in codes on only single experience at a given time.

### Assumptions

1. The experience designer is responsible for imbedding the creation of response details record for the extract in the experience flow and for the content of some of record’s fields, e.g. the experience milestone text.
2. Segment Name is taken from the experience panel when populated via Experience Assignment, empty otherwise.
3. The experience instance name is taken from the experience panel when the experience is triggered via an Instance, empty otherwise.
4. Due to extraction and processing time, extraction for wireless will start before the requested time and will include data collected up to the execution starting time, e.g. the extraction of the 8AM report will start at 7:45AM and will include data up to 7:45AM.
5. Due to extraction and processing time, extraction for home will be available for CVM several minutes after the requested time, e.g. the extraction of the 12:00AM report will be available at 0:15AM and will include data up to 12:00AM.
6. The report includes only valid responses. A valid response is a response with a code that is valid within a single experience for the responding subscriber. A response that is not valid, for any reason, is not included in the report.
7. There will be only a single 2 ways SMS flow within an experience. The Invite milestone is assumed to be that of the opt-in invitation. The subscriber could be in only one opt-in block, multiple opt-in blocks could be defined but as mutual exclusive blocks. The Success milestone is assumed to be the last Success milestone prior to the generation of the record.
8. When an extract is generated it will include all new records from the last extract, this includes records that are older than the report’s schedule.

### Flow Diagram



### Flow Description

1. An Engage Experience sends an SMS to a subscriber with an opt-in code specification.
2. Subscriber sends an SMS to the short number, dedicated to Engage, with the specified opt-in code.
3. Response is successfully processed and matched within the Experience,
4. Response details record is written into an internal queue.
5. Periodic process reads from the internal queue all responses of last period, writes those to a CSV file on a local folder.

## Prepaid Two ways SMS response extract

### File

Engage will generate periodic file containing prepaid subscribers two ways SMS responses.

| Type | | Description |
| --- | --- | --- |
| **File Format** | CSV:  ***Character encoding***: UTF8.  ***Field separator***: Vertical bar (pipe) – '|' (U+007C)  ***Record separator***: Line Feed (U+000A). | |
| **File Name Convention** | Prepaid\_2waySMSReply\_YYYYMMDD\_HHMM.csv where HH is in 24h format.  The last date and time for a response to be included in this file.  Example - Prepaid\_2waySMSReply\_20210118\_1645.csv | |
| **File Compression** | None | |
| **File Place** | [**\**\10.30.31.180\AIA-Optin-Prepaid](file:///\\10.30.31.180\AIA-Optin-Prepaid)  The URL is configurable. | |
| **User & Password** | To be defined during integration. | |
| **Upload Completion Rule** | When file is being uploaded its extension is \*.tmp.  Once the file upload was completed successfully, the suffix will be changed to \*.csv. | |
| **Frequency** | 2 files will be generated every day   * Responses from 07:45 included to 16:45 not included * Responses from 16:45 included to 07:45 not included on the day after   The schedule is configurable. | |
| **File size** | There will be no size limit to the file.  If no valid responses during the period, then the file will include only a header record without any data records. | |
| **Header and tail** | A header record will hold the fields names separated by the fields separator.  There will be no tail record. | |

### Record

| # | Column Name | Data Type | M/O | Description | Sample Value |
| --- | --- | --- | --- | --- | --- |
|  | MIN | string | M | Subscriber's full MSISDN | 639498187275 |
|  | Brand | string | M | Brand of the subscriber as defined on the Prepaid subscriber profile | Smart Prepaid |
|  | Experience name | String | M | The experience name | PP\_ECL\_Optin |
|  | From Eligible Date Prt | Date | M | The date when subscriber became part of the campaign  Format: YYYY-MM-DD | 2021-01-15 |
|  | Segment Name | String | O | Segment Name from Experience Assignment | SMART\_ECL |
|  | Instance Name | String | O | Instance name that triggered the experience | SPD\_ECL\_01 |
|  | Experience Milestone | String | M | Last milestone recorded on the experience Success / No success | No success |
|  | Optin Code Reply | String | M | The reply text | NO |
|  | Date and Time of Optin Reply | DateTime | M | The date and time the reply was received  Format: YYYY-MM-DD HH:MM: SS  HH is in 24h format | 2021-01-18 14:23:56 |
|  | Optin Reply Successful Tag | String | M | Reply processing status Fixed value “Success” | Success |

## Postpaid Two ways SMS response extract

### File

Engage will generate periodic file containing postpaid subscribers two ways SMS responses.

| Type | | Description |
| --- | --- | --- |
| **File Format** | CSV:  ***Character encoding***: UTF8.  ***Field separator***: Vertical bar (pipe) – '|' (U+007C)  ***Record separator***: Line Feed (U+000A). | |
| **File Name Convention** | Postpaid\_2waySMSReply\_YYYYMMDD\_HHMM.csv where HH is in 24h format.  The last date and time for a response to be included in this file.  Example - Postpaid\_2waySMSReply\_20210118\_1645.csv | |
| **File Compression** | None | |
| **File Place** | [**\**\10.30.31.180\AIA-Optin-Postpaid](file:///\\10.30.31.180\AIA-Optin-Prepaid)  The URL is configurable. | |
| **User & Password** | To be defined during integration. | |
| **Upload Completion Rule** | When file is being uploaded its extension is \*.tmp.  Once the file upload was completed successfully, the suffix will be changed to \*.csv. | |
| **Frequency** | 2 files will be generated every day   * Responses from 07:45 included to 16:45 not included * Responses from 16:45 included to 07:45 not included on the day after   The schedule is configurable. | |
| **File size** | There will be no size limit to the file.  If no valid responses during the period, then the file will include only a header record without any data records. | |
| **Header and tail** | A header record will hold the fields names separated by the fields separator.  There will be no tail record. | |

### Record

| # | Column Name | Data Type | M/O | Description | Sample Value |
| --- | --- | --- | --- | --- | --- |
|  | MIN | string | M | Subscriber's full MSISDN | 639498187276 |
|  | Brand | string | M | Brand of the subscriber as defined on the Postpaid subscriber profile | Smart Postpaid |
|  | Experience name | String | M | The experience name | PP\_ECL\_Optin |
|  | From Eligible Date Prt | Date | M | The date when subscriber became part of the campaign, from experience definition  Format: YYYY-MM-DD | 2021-01-15 |
|  | Segment Name | String | O | Segment Name from Experience Assignment | SMART\_ECL |
|  | Instance Name | String | O | Instance name that triggered the experience | SPD\_ECL\_01 |
|  | Experience Milestone | String | M | Last milestone recorded on the experience Success / No success | Success |
|  | Optin Code Reply | String | M | The reply text | Yes |
|  | Date and Time of Optin Reply | DateTime | M | The date and time the reply was received  Format: YYYY-MM-DD HH:MM: SS  HH is in 24h format | 2021-01-18 14:23:56 |
|  | Optin Reply Successful Tag | String | M | Reply processing status Fixed value “Success” | Success |

## Home Two ways SMS response extract

### File

Engage will generate periodic file containing home subscribers two ways SMS responses.

| Type | | Description |
| --- | --- | --- |
| **File Format** | CSV:  ***Character encoding***: UTF8.  ***Field separator***: Vertical bar (pipe) – '|' (U+007C)  ***Record separator***: Line Feed (U+000A). | |
| **File Name Convention** | PLDT\_2waySMSReply\_YYYYMMDD\_HHMM.csv where HH is in 24h format.  The last date and time for a response to be included in this file.  Example - PLDT\_2waySMSReply\_1200.csv | |
| **File Compression** | None | |
| **File Place** | \\10.30.31.180\AIA\_SMS\2WaySMSDump\  The URL is configurable. | |
| **User & Password** | To be defined during integration. | |
| **Upload Completion Rule** | When file is being uploaded its extension is \*.tmp.  Once the file upload was completed successfully, the suffix will be changed to \*.csv. | |
| **Frequency** | 2 files will be generated every day   * Responses from 00:00 included to 12:00 not included * Responses from 12:00 included to 00:00 not included on the day after   The schedule is configurable. | |
| **File size** | There will be no size limit to the file.  If no valid responses during the period, then the file will include only a header record without any data records. | |
| **Header and tail** | A header record will hold the fields names separated by the fields separator.  There will be no tail record. | |

### Record

| # | Column Name | Data Type | M/O | Description | Sample Value |
| --- | --- | --- | --- | --- | --- |
|  | Account | string | M | The Account ID from the Account profile that is the ‘parent’ of the Home subscriber profile | 0122477282 |
|  | Service ID | string | M | The Subscription ID of the subscriber as defined on the Home profile | 0285304284 |
|  | Experience ID | String | M | The experience name | HM\_Tech\_Migration |
|  | Instance ID | Date | O | Instance name that triggered the experience | HM\_Tech\_Migration\_007 |
|  | Invitation Date | DateTime | M | The date and time the invitation was sent  Format: YYYY-MM-DD HH:MM: SS  HH is in 24h format | 2021-01-18 12:34:56 |
|  | Keyword Reply | String | M | The reply text | Y |
|  | Date and Time of Reply | DateTime | M | The date and time the reply was received  Format: YYYY-MM-DD HH:MM: SS  HH is in 24h format | 2021-01-18 14:23:56 |

## Error/Recovery Handling

If there is an error during record processing or file processing, Engage will write the error to an Engage log.

An error in record processing causes the erroneous record to be discarded, it doesn’t stop the extract generation for other records.

# Two ways SMS extracts transfer

## File transfer

### Description

File transfer will be performed using a dedicated server.

Files will be transferred by Engage to the dedicated server, which will be mounted to a PLDT NAS storage.

Engage will push the data to that server to the below folder structure.

CVM admins will have access to the below mounted folders, from where they will get the files.

Directory structure:

Prepaid - \\x.y.z\AIA\_SMS\AIA-Optin-Prepaid

Postpaid - \\x.y.z\AIA\_SMS\AIA-Optin-Postpaid

Home - \\x.y.z\AIA\_SMS\2WaySMSDump

### Assumptions

1. The dedicated server will be set by Engage on Transformation area, and will mount itself to the provided NAS storage given by PLDT
2. It is the responsibility of PLDT to request for network setup for the connectivity to the mounted storage.
3. It is the responsibility of PLDT to setup the connectivity between the CVM Admin team and the mounted storage.
4. PLDT will determine CVM admin access rights per the admin’s LOB.
5. Permission on the mounted folders are not controlled by Amdocs. In case the admin has permission for file deletion, the file might be deleted before the completion of the retention period.
6. Amdocs recommends setting security groups for ReadOnly on PLDT ActiveDirectory that will be managed by PLDT IT and will allow adding/removing CVM team members to these security group per need (each group for its mounted folder)
7. Amdocs will ensure NAS mounted folders are being cleaned according to defined retention period, to avoid storage getting filled.

### Flow Diagram



### Flow Description

1. Job accesses local folder seeking for a new file.
2. Upon detection of new file, the job transfers the file to relevant folder per CVM need
3. A different job archives the files on an Engage directory.
4. CVM admin manually accesses the files on the mounted folder.
5. A daily job on the Engage side purges old files from the mounted folder.

## Error/Recovery Handling

If there is an error on the Engage job, a retry will be performed.

If retry fails Engage write the error will be logged.

## Archiving Handling

A copy of the file will be archived on Engage for 7 days.

The duration for keeping the files on the archive is configurable.

When an archived file is required, then the CVM admin should open a case for manual retrieval of the archived file from Engage. Such a file will be manually transferred to the requestor, i.e. not via the file transfer mechanism.

## Data Security

Secured mount will be used from Engage side to dedicated NAS storage, and from CVM side over permission setting by PLDT AD/LDAP to the mount folders.

# Open Issues

| OI ID# | Description | Owner | Status | Resolution |
| --- | --- | --- | --- | --- |
| 1 | What are the requirement for the FTP folder?   * Network * OS * Size * File retention period | PLDT | Closed | File transfer via mounted NAS storage |
| 2 | How will manage the folder?   * File deletion * Monitoring free space and adding if needed | Amdocs | Close | Amdocs |
| 3 | Define the procedure for handling recovery of files | Amdocs | Closed | Manual procedure described on section Archiving Handling |
| 4 | Definition of the IML | Amdocs | Closed | AIA200 |