



# Vanilla Management System (VMS)

Version: VMSGPRHOST\_4.3

## Installation Manual for Data Migration Utility

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# Document Control

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# 1 Introduction

This document is the guide for the VMS Data Migration Utility delivered to InComm. This document gives the step by step instructions to:

1. Product Configuration Activity Before Migration
2. Install the VMS Migration Utility
3. Execute the VMS Migration Utility
4. Pull the migration reports
5. Rollback the migrated data

## 1.1 Product Configuration Activity before Migration

- ☐ BIN
- ☐ Product
- ☐ Product Category
- ☐ Product Profile/Parameters
- ☐ Product Category Profile/Parameters
- ☐ PIN and CVV keys
- ☐ Fees
- ☐ Product/Product Category Fee mapping
- ☐ Limit profile
- ☐ Product/Product Category Limit mapping
- ☐ SMS and Email alert configuration at product category
- ☐ Inventory Merchant Information
- ☐ Inventory Location/Store Information
- ☐ Host and CS Desktop Users.

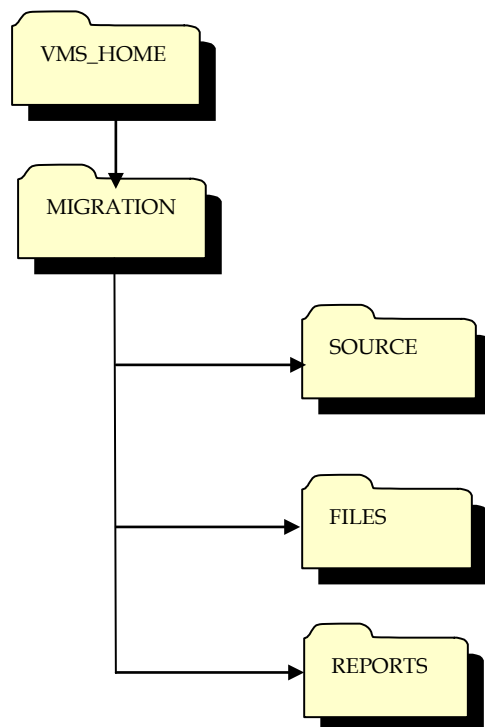
## 2 Migration Utility Directory Structure

The VMS Migration Utility is a set of command line scripts which can be executed to perform data migration activity in VMS. The Data Migration Package includes the following folders:

- Source
- Files
- Reports

Currently, all VMS release scripts are placed under a path identified by the environment variable VMS\_HOME. The VMS Migration utility will also be placed in the same path.

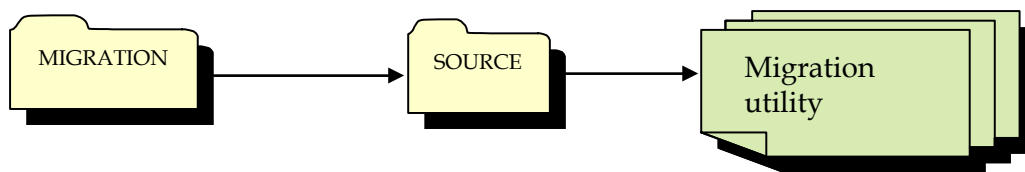
The below figure depicts the directory structure of the VMS Migration utility relative to the environment variable VMS\_HOME:



The following sections give the purpose of the different sub-directories within the main migration package:

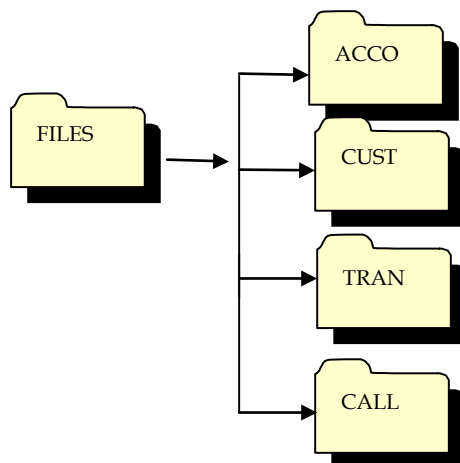
## 2.1 Source

This folder contains the scripts for the various database objects which are part of the migration utility. This also includes the executables which will be used to install and run this utility.



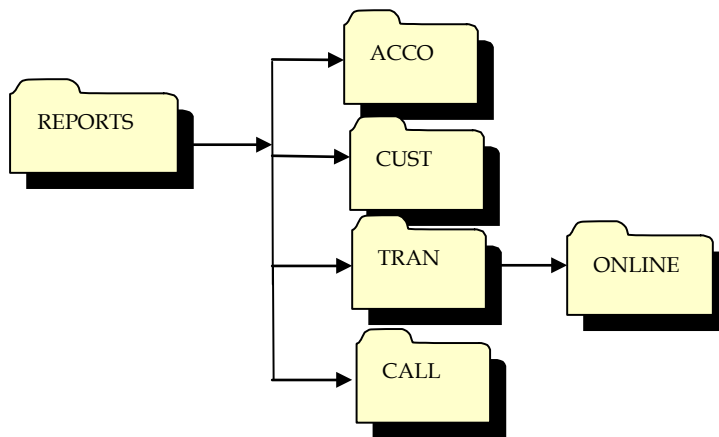
## 2.2 Files

This folder will be used to hold all data files containing the data to be migrated. The input data files extracted from the source system should be placed in this folder. Multiple sub-folders (ACCO, CUST, TRAN and CALL) are present within this folder to hold Account, Customer, Support Function and Transaction files.



## 2.3 Reports

This folder will be used to store the reports generated after the migration process. Multiple sub-folders (ACCO, CUST, TRAN, CALL) exist within this folder for specific reports.



The ACCO folder will hold reports for Accounts, CUST will hold reports for cards, customers and TRAN will hold reports for transaction and CALL will hold reports for call logging details. The Summary reports will get generated in Reports folder.

Online transaction data file will be generated in ONLINE folder which can be used for replay in MIO system in case of rollback of migrated data in VMS system.



### 3 Installation Steps

Following are the steps for the installation of the migration utility in the end environment:

**1. Step 1: Copy Migration utility**

Copy the folder 'MIGRATION' from the installation package to the path identified by the environment variable VMS\_HOME.

Appropriate privileges (Read/Write/Execute) should be provided to all folders and files in this folder.

**2. Step 2: Creation of Migration objects in VMS Database**

The VMS Migration utility contains scripts for the creation of database objects. These objects include the tables which are required to hold migration data and the procedures which are required to transform this data into VMS.

Also creation of Oracle directories for the file loading process. These directories are required for the paths referred in Section 2.2 where the input data files for Account, customer and transaction will be placed.

**Before executing this patch, if any existing migration objects present in the system, then please execute the below command to drop the existing object and proceed further**

**@\$VMS\_HOME/MIGRATION/SOURCE/DROP\_MIGR\_OBJECTS.sql**

**3. Step 3: Execute following steps to create objects required for Migration:**

- a. Take **SYS** login of Oracle using SQLPLUS interface
- b. Execute the script:

**@\$VMS\_HOME/MIGRATION/SOURCE/CREATE\_OBJECTS.sql**

Post execution of above script it will prompt to enter for VMSCMS Schema password, ConnectionString for DB and VMS\_HOME Path. Please check log file generated in below mentioned path

**\$VMS\_HOME/MIGRATION/CREATE\_OBJECTS.log**

If any ORA error occurs during object creation then execute the below script to rollback objects created.

**@\$VMS\_HOME/MIGRATION/SOURCE/DROP\_MIGR\_OBJECTS.sql**

Please check log file generated in below mentioned path

**\$VMS\_HOME/MIGRATION/MIGR\_OBJECTS\_DROP.log**

**4. Step 4: Copy data files**

Copy the data files extracted from the host system to the folder

## VMS\_HOME/MIGRATION/FILES/

There are separate folders for each entity. Copy all data files in respective sub-folders. Following is the entity wise directory path where respective files need to be placed:

Sl. No.	Data Unit/Entity	Path
1	Account	VMS_HOME/MIGRATION/FILES/ACCO/
2	Customer and Card	VMS_HOME/MIGRATION/FILES/CUST/
3	Transaction	VMS_HOME/MIGRATION/FILES/TRAN/
4	Call Log	VMS_HOME/MIGRATION/FILES/CALL/

### Note:

- At least 1 file is required per entity.
- Please make sure that all the data files are copied in respected folders before proceeding for the execution of migration process.
- Please refer file specification format document listed in the References section below for expected format of files.

## 4 Execution of Migration Utility

Following are the steps for the execution of the VMS Migration Utility and migration of data into VMS:

1. Ensure that a back-up of the VMS database is taken
2. Execute the script:

```
@$VMS_HOME/MIGRATION/SOURCE/DATA_LOAD.sql
```

Post execution of above script need to verify the generated reports in reports sub folder (ACCO, CUST, TRAN, CALL). Data loaded into staging table is having any issue then needs to execute below Data Load rollback.

```
@$VMS_HOME/MIGRATION/SOURCE/DATA_LOAD_ROLLBACK.sql
```

After verification of loaded data, execute below script for the execution of migration utility.

```
@$VMS_HOME/MIGRATION/SOURCE/EXE_MIGR.sql
```

### Note:

- The process will take time depending on the volume of data uploaded in the files.
- If the process fails/aborts due to any error, please report the error displayed on the screen to the FSS onsite technical support.
- After successful execution of the process, verify the reports generated.
- Refer Section 7 for the details of Rollback process.

## 5 Reports

The VMS data migration utility will generate reports which can be used to verify the outcome of the process, post migration verification and reconciliation. The following table gives details of the reports which will be generated by the Migration Utility. The format of these reports is given in the VMS Data Migration Approach Document listed in the References section. Extract these reports from the respective locations to a sage repository.

Sl. No	Report Name	Report Location
1	Summary Report	VMS_HOME/MIGRATION/REPORTS/TRANSACTION_DATA_SUMRY_REP.csv VMS_HOME/MIGRATION/REPORTS/CUST_CARD_DATA_SUMRY_REP.csv
2	Account Data File Load Reports	VMS_HOME/MIGRATION/REPORTS/ACCO/ACCO_FILE_LOAD_SUCC.csv VMS_HOME/MIGRATION/REPORTS/ACCO/ACCO_FILEWISE_LOAD_SUMRY.csv VMS_HOME/MIGRATION/REPORTS/ACCO/ACCO_FILE_LOAD_EXCP.csv
3	Customer Data File Load Reports	VMS_HOME/MIGRATION/REPORTS/CUST/CUST_FILE_LOAD_SUCC.csv VMS_HOME/MIGRATION/REPORTS/CUST/CUST_FILEWISE_LOAD_SUMRY.csv VMS_HOME/MIGRATION/REPORTS/CUST/CUST_FILE_LOAD_EXCP.csv
4	Transaction Data File Load Reports	VMS_HOME/MIGRATION/REPORTS/TRAN/TRAN_FILE_LOAD_SUCC.csv VMS_HOME/MIGRATION/REPORTS/TRAN/TRAN_FILEWISE_LOAD_SUMRY.csv VMS_HOME/MIGRATION/REPORTS/TRAN/TRAN_FILE_LOAD_EXCP.csv
5	Account	VMS_HOME/MIGRATION/REPORTS/ACCO/DETAIL_EXCP_A

Sl. No	Report Name	Report Location
	Data Load Exception Report	CCT_LOAD_REP.csv
6	Card Data Load Exception Report	VMS_HOME/MIGRATION/REPORTS/CUST/DETAIL_EXCP_C UST_LOAD_REP.csv
7	Transaction Data Load Exception Report	VMS_HOME/MIGRATION/REPORTS/TRAN/DETAIL_EXCP_T RAN_LOAD_REP.csv
8	Successful Account Data Detail Report	VMS_HOME/MIGRATION/REPORTS/ACCO/ACCT_SUCC_DE TL_REP.csv
9	Successful Card Data Detail Report	VMS_HOME/MIGRATION/REPORTS/CUST/CUST_SUCC_DET L_REP.csv
10	Successful Transaction Data Detail Report	VMS_HOME/MIGRATION/REPORTS/TRAN/TRAN_SUCCESS_ DETAIL_REP.csv
11	Account Data Exception Report	VMS_HOME/MIGRATION/REPORTS/ACCO/DETAIL_EXCP_A CCT_REP.csv
19	Card Data Exception Report	VMS_HOME/MIGRATION/REPORTS/CUST/ CUST_EXCP_DETL_REP.csv
20	Transaction	VMS_HOME/MIGRATION/REPORTS/TRAN/TRAN_DETL_EX

Sl. No	Report Name	Report Location
	Data Exception Report	CP_REP.csv
21	Rollback Summary Report	VMS_HOME/MIGRATION/REPORTS/TRAN/ROLL_TRAN_DATA_SUMRY_REP.csv VMS_HOME/MIGRATION/REPORTS/CUST/ROLL_CARD_DATA_SUMRY_REP.csv VMS_HOME/MIGRATION/REPORTS/ACCO/ROLL_ACCT_DATA_SUMRY_REP.csv VMS_HOME/MIGRATION/REPORTS/ACCO/MIGR_ROLL_DETL_EXCP_REP.csv VMS_HOME/MIGRATION/REPORTS/CALL/ROLL_CALL_DATA_SUMRY_REP.csv
22	Call Data Load Exception Report	VMS_HOME/MIGRATION/REPORTS/CALL/DETAIL_EXCP_CUST_LOAD_REP.csv
23	Call Data File Load Reports	VMS_HOME/MIGRATION/REPORTS/CALL/CALL_FILE_LOAD_SUCC.csv VMS_HOME/MIGRATION/REPORTS/CALL/CALL_FILEWISE_LOAD_SUMRY.csv VMS_HOME/MIGRATION/REPORTS/CALL/CALL_FILE_LOAD_EXCP.csv
24	Successful Call Data Detail Report	VMS_HOME/MIGRATION/REPORTS/CALL/CALL_SUCC_DET_L_REP.csv
25	Call Data Exception Report	VMS_HOME/MIGRATION/REPORTS/CALL/ CALL_EXCP_DETL_REP.csv

## 6 Post-Migration Activity

Post migration and prior card production from VMS, separate script will be provided to update Card and Account serial numbers of the BINs and Products of the migrated data. This is a mandatory activity after the Data Migration process and before new Card Issuance/Re-Issuance from VMS.

Verify the reports generated by the Migration utility and perform end-to-end sanity of the application to ensure successful execution of the Data Migration. Refer the Post-Migration Checks section in the VMS Data Migration Approach document listed in the References section below.

Post migration, execute below update activity on migrated data:

@\$VMS\_HOME/MIGRATION/SOURCE/CTRLNO\_UPDT\_ACTIVITY.sql

Execute below block to update Pan and Acct control number for migrated product and product category.

DECLARE

```
P_INST_CODE NUMBER;  
P_BRANCH_ID VARCHAR2(200);  
P_PROD_CODE VARCHAR2(200);  
P_CARD_TYPE VARCHAR2(200);  
P_ACCT_CTRL_NUMB NUMBER;  
P_PAN_CTRL_NUMB NUMBER;  
P_ERR_MSG VARCHAR2(200);
```

BEGIN

```
P_INST_CODE := NULL;  
P_BRANCH_ID := NULL;  
P_PROD_CODE := NULL;  
P_CARD_TYPE := NULL;  
P_ACCT_CTRL_NUMB := NULL;
```

```
P_PAN_CTRL_NUMB := NULL;  
P_ERR_MSG := NULL;
```

```
VMSCMS.SP_PANACCT_CTRL_UPDT  
    ( P_INST_CODE,  
      P_BRANCH_ID,  
      P_PROD_CODE,  
      P_CARD_TYPE,  
      P_ACCT_CTRL_NUMB,  
      P_PAN_CTRL_NUMB,  
      P_ERR_MSG  
    );  
  
END;
```

Above variables needs to be replaced with actual values:

**For Example:**

Replace P\_INST\_CODE with '1'

Replace P\_BRANCH\_ID with '0001'

Replace P\_PROD\_CODE with 'MP49'

Replace P\_CARD\_TYPE with '1'

Replace P\_ACCT\_CTRL\_NUMB with maximum account control available on the combination of product, product category, branch id in legacy system.

Replace P\_PAN\_CTRL\_NUMB with maximum pan control available on the combination of product, product category, branch id in legacy system.



## 7 Rollback Process

InComm need to provide migration sequence id to rollback migrated data. This migration sequence id will be used for data migration rollback process. The migration sequence id will identify the product for which migrated data should be completely rolled back.

Use following command to get the details of migration id and file name associated with it.

- ❑ @\$VMS\_HOME/MIGRATION/SOURCE/ROLL\_SEQNO\_DETL.sql

Following is the sample output of above query:

FILE_NAME	PROESS_DATE	MIGR_SEQ_NO
MIYO_ACCO_0001.txt	10-Jul-13	1
MIYO_CUST_0001.txt	10-Jul-13	1
MIYO_TRAN_0001.txt	10-Jul-13	1
MIYO_CALL_0001.txt	10-Jul-13	1

Log file for above script will be generated in below path:

- ❑ \$VMS\_HOME/MIGRATION/ROLL\_SEQNO\_DETL.log

Use following command to generate online transaction data file:

- ❑ @\$VMS\_HOME/MIGRATION/SOURCE/GEN\_ONLINE\_TXNDATA\_FILE.sql;

Above script will ask for the migration sequence number. Enter the migration sequence number for which online transaction data file needs to be generated. File naming convention, header footer format and file format will remain same as per existing Transaction data file format.

Online transaction data file for above script will be generated in below path:

- ❑ \$VMS\_HOME/MIGRATION/REPORTS/TRAN/ONLINE

### **Note**

- ❑ As data delete operation will be performed during Rollback process from the various tables, this process may take time depending upon the number of records which needs to rollback



- New Card issuance or Accounts creation will not be done on migrated cards.
- Online Data file will be created only for online transactions performed on migrated cards and not for newly issued cards and accounts.
- ROLLBACK will be for all migrated cards for a product code using sequence id.

Use following command to execute Migration Rollback process:

- @\$VMS\_HOME/MIGRATION/SOURCE/ROLLBACK\_MIGR.sql;

Above scripts will ask for the migration sequence number. Enter the migration sequence number associated with product for which the data needs to be rolled back.

## 8 References

Sl. No.	Document Name	Version
1	FSSTech_SD_VMS_Data Migration File Specification.pdf	1.7
2	FSSTech_SD_CMS_InComm_Data Migration Approach_1.1.doc	1.1