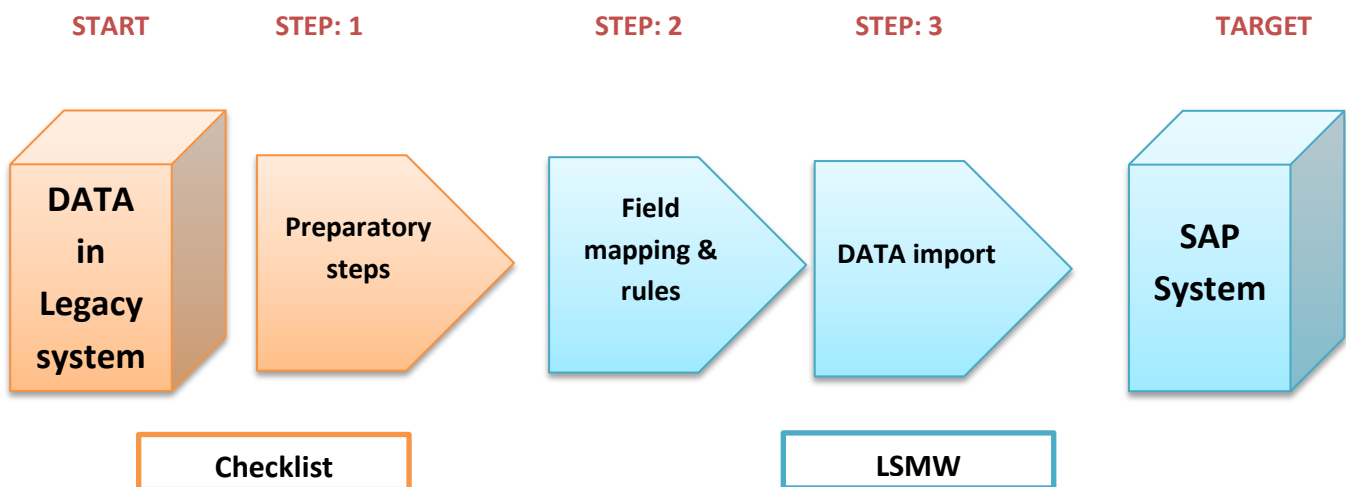# LSMW-(Legacy System Migration Workbench)

LSMW is a tool that supports the transfer of data from non-SAP systems ("Legacy Systems") to SAP R/3 systems. This can be a one-time transfer as well as a periodic one.

LSMW also supports conversion of data of the legacy system in a numerous way. The data can then be imported into the SAP R/3 system via batch input, direct input, BAPIs or IDocs.

In simple Words: In big organizations we have to create more than 1000 of materials or vendors in sap it's too much time taking process to do this in within system to do this step by step for each material or vendor, so SAP gives us provision to gather data which is in our spreadsheets or word documents and direct get it into the SAP system.

START	STEP: 1	STEP: 2	STEP: 3	TARGET
DATA in Legacy system	Preparatory steps	Field mapping & rules	DATA import	SAP System
	Checklist		LSMW	

T-CODE: LSMW

Legacy System Migration Workbench

All Objects | My Objects | All Project Objects | Project Documentation

Project Selection

Project	FA PROJECT	FA PROJECT
Subproject	FA PROJECT-1	FA PROJECT-1
Object	FA VENDOR DATA	FA VENDOR DATA

First we need to create Project Name in the initial screen

Steps of LSMW

LSM Workbench: FA PROJECT, FA PROJECT-1, FA VENDOR DATA: FA VENDOR DAT

User Menu   Numbering Off   Double Click=Display   Object Overview   Action Log

Process Step	Last Action (Date, Time, User)
Maintain Object Attributes	
Maintain Source Structures	
Maintain Source Fields	
Maintain Structure Relations	
Maintain Field Mapping and Conversion Rules	
Maintain Fixed Values, Translations, User-Defined Routines	
Specify Files	
Assign Files	
Read Data	
Display Read Data	
Convert Data	
Display Converted Data	
Create Batch Input Session	
Run Batch Input Session	

STEP-1:- Here, we are Maintaining the Object Attribute and Selecting Batch Input Recording Method. In this method we can create a recording of our own and use it to upload/change data. According to method we are create recording of Project.

Maintain Object Attributes

LSM Workbench: Change Object Attributes

⬖ Display <-> Change   📝 Documentation   🎨 Display Interfaces

Attributes

Object	**FA VENDOR DATA**	FA VENDOR DATA
Owner	**AKASHH**	AKASHH
Data Transfer	⦿ Once-Only	◯ Periodic
File Names	☐ System-Dependent	

Object Type and Import Method

◯ Standard Batch/Direct Input
  Object
  Method
  Program Name
  Program Type

⦿ Batch Input Recording
  Recording

◯ Business Object Method (BAPI)
  Business Object
  Method
  Message Type
  Basic Type

◯ IDoc (Intermediate Document)
  Message Type
  Basic Type
  Enhancement

Recordings of Project 'FA PROJECT': Overview

📄 ✏️ ⬖ 🗐 ▶️ 🗑️ 🗗 📥 📤 📑 Subtree   📑 Row

Recordings

Create Recording

Recording	**FARECORD**
Description	FARECORD
Owner	**AKASHH**

Based on that, we are doing recording for Vendor master Data so Enter Vendor Master Data T code-**XK01.**as well as put all the required information for Data Migration.

Recordings of Project 'FA PROJECT': Overview

Recordings

Transaction Code

Transaction Code   XK01

Create Vendor: Address

CIN Details

| Vendor | INTERNAL |

Address

| Title | COMPANY | | |
| Name | ZECO VENDOR | Search term | |

Street		PO Box	
City		Postal Code	
District			
P.O.Box city		PO Box PCode	
Country	DE	Region	

Communications data

Language Key	EN	Telex number	
Telephone 1		Fax Number	
Telephone 2		Teletex number	
Telebox		Data line	
InternetAdd.			Home Page

Accounting information

Recon. account	160000	Sort key	
Head office		Subsidy indic.	
Authorization		Cash mgmnt group	A1
		Release group	
Minority indic.		Certificatn date	

Interest calculation

Interest indic.		Last key date	
Interest cycle		Last interest run	

Withholding tax

W. Tax Code		Exemption number	
WH Tax Country		Valid until	
Recipient type		Exmpt.authority	

Reference data

Prev.acct no.		Personnel number	

Create Vendor: Purchasing data

Vendor	INTERNAL	ZECO VENDOR	
Purchasing Org.	Z005	FA PurchOrg	

Conditions

Order currency	EUR
Terms of paymnt	NP30
Incoterms	
Minimum order value	
Schema Group, Vendor	
Pricing Date Control	
Order optim.rest.	

Sales data

Salesperson	
Telephone	
Acc. with vendor	

Control data

☐ GR-Based Inv. Verif.	ABC indicator	☐ RMA Required
☐ AutoEvalGRSetmt Del.	ModeOfTrnsprt-Border	
☐ AutoEvalGRSetmt Ret	Office of entry	
☐ Acknowledgment Reqd	Sort criterion	
☐ Automatic purchase order	PROACT control prof.	

☑ Vendor 0000300476 has been created for company code 1000 purchasing organization Z005

SAP

Create Recording

Default | Default All | Reset | Screen Field | Screen Field | 📝 | Repeat Recording | Maintain Attributes | ☒ ☒ ☒ Subtree | ☒ Row

```
Recording FARECORD          FARECORD

       ⌐ XK01 Create Vendor (Centrally)

           ⌐ SAPMF02K 0100

               ── BDC_CURSOR          RF02K-KTOKK
               ── BDC_OKCODE          /00
               ── RF02K-BUKRS         1000          BUKRS     Company Code
               ── RF02K-EKORG         Z005          EKORG     Purchasing Organization
               ── RF02K-KTOKK         0001          KTOKK     Vendor account group

           ⌐ SAPMF02K 0110

               ── BDC_CURSOR          LFA1-SPRAS
               ── BDC_OKCODE          /00
               ── LFA1-ANRED          COMPANY       ANRED     Title
               ── LFA1-NAME1          ZECO VENDOR   NAME1     Name 1
               ── LFA1-LAND1          DE            LAND1     Country Key
               ── LFA1-REGIO                        REGIO     Region (State, Province, County)
               ── LFA1-SPRAS          EN            SPRAS     Language Key

           ⌐ SAPLSPO1 0100

               ── BDC_OKCODE          =YES

           ⌐ SAPMF02K 0210
```

LSM Workbench: Change Object Attributes

👓 Display <-> Change | 📝 Documentation | 🏔 Display Interfaces

Attributes

Object	FA VENDOR DATA	FA VENDOR DATA
Owner	AKASHH	AKASHH
Data Transfer	⦿ Once-Only	◯ Periodic
File Names	☐ System-Dependent	

Object Type and Import Method

◯ Standard Batch/Direct Input
- Object ☐
- Method ☐
- Program Name ☐ 🐾
- Program Type ☐

⦿ Batch Input Recording
- Recording FARECORD   FARECORD   📤 🏔

◯ Business Object Method (BAPI)
- Business Object ☐
- Method ☐
- Message Type ☐
- Basic Type ☐

◯ IDoc (Intermediate Document)
- Message Type ☐
- Basic Type ☐
- Enhancement ☐

LSM Workbench: FA PROJECT, FA PROJECT-1, FA VENDOR DATA: FA VENDOR DAT

⟳ User Menu | Numbering Off | Double Click=Display | 🏔 Object Overview | 🍞 Action Log

Process Step	Last Action (Date, Time, User)
Maintain Object Attributes	12.07.2021, 23:22:38 h, AKASHH
Maintain Source Structures	

LSM Workbench: Object Overview (Table)

Overview in List Format

FA PROJECT - FA PROJECT-1 - FA VENDOR DATA

Structure	Structure Description	Target Field Name	Field Description	Type	Target Length	Source Field Name	Source Length	Conversion Method	Code/Commentary
FARECORD	FARECORD	TABNAME	Table Name	CHAR	000030				
		TCODE	Transaction Code	CHAR	000020				
		BUKRS	Company Code	CHAR	000004				
		EKORG	Purchasing Organization	CHAR	000004				
		KTOKK	Vendor account group	CHAR	000004				
		ANRED	Title	CHAR	000015				
		NAME1	Name 1	CHAR	000035				
		LAND1	Country Key	CHAR	000003				
		REGIO	Region (State, Province, County)	CHAR	000003				
		SPRAS	Language Key	LANG	000002				
		AKONT	Reconciliation Account in General Ledger	CHAR	000010				
		FDGRV	Planning group	CHAR	000010				
		WAERS	Purchase order currency	CUKY	000005				
		ZTERM	Terms of Payment Key	CHAR	000004				

> **I have copied this data and paste on MS Excel**

STEP-3

Maintain Source Fields

In this screen, the Fields which is maintained in the Object Overview this fields I have maintained here. Source Filed is used to identify whether a certain record should go to the specified structure.

Source Fields for Source Structure FASOURCE

Field Name	Type	L...	Field description
BUKRS	C	4	Company Code
EKORG	C	4	Purch. Organization
KTOKK	C	4	Account group
ANRED	C	15	Title
NAME1	C	35	Name 1
LAND1	C	3	Country Key
REGIO	C	3	Region
SPRAS	C	2	Language Key
AKONT	C	10	Reconciliation acct
FDGRV	C	10	Planning group
WAERS	C	5	Currency
ZTERM	C	4	ZTERM

LSM Workbench: Change Source Fields

🕹 | 🗋 ✏ 🗑 🗋 🎞 | 📝 | 🔩 🏤 | 🔛 🗐 🔚 Subtree | 🔚 Position | 🔘 Fields with the Same Name

FA PROJECT - FA PROJECT-1 - FA VENDOR DATA FA VENDOR DATA

Source Fields

    📂 FASOURCE   FASOURCE

BUKRS	C(004)	Company Code
EKORG	C(004)	Purch. Organization
KTOKK	C(004)	Account group
ANRED	C(015)	Title
NAME1	C(035)	Name 1
LAND1	C(003)	Country Key
REGIO	C(003)	Region
SPRAS	C(002)	Language Key
AKONT	C(010)	Reconciliation acct
FDGRV	C(010)	Planning group
WAERS	C(005)	Currency
ZTERM	C(004)	ZTERM

FROM SE11

Dictionary: Display Data Element

🕹 🗂 🔒 ✏ 🖳 | 🔩 🔚 🔢 | 🔩 🔩 | Documentation | Supplementary Documentation

Data element	BUKRS	Active
Short Description	Company Code	

Attributes | Data Type | Further Characteristics | Field Label

🔘 Elementary Type

   🔘 Domain   BUKRS   Company code

                      Data Type   CHAR   Character String

                      Length   4

   🔘 Predefined Type   Data Type

                      Length   0

STEP-4:- **The structure which need for processing of data so will need to be assign here.in the object contains lots of source structure.**

Maintain Structure Relations

LSM Workbench: Change Structure Relationships

Relationship Relationship Subtree Position

FA PROJECT - FA PROJECT-1 - FA VENDOR DATA FA VENDOR DATA

Structure Relations

FARECORD FARECORD   <<<< FASOURCE FASOURCE
            Select Target Structure FARECORD .

Information

ℹ️ A source structure is already assigned to target
   structure FARECORD.
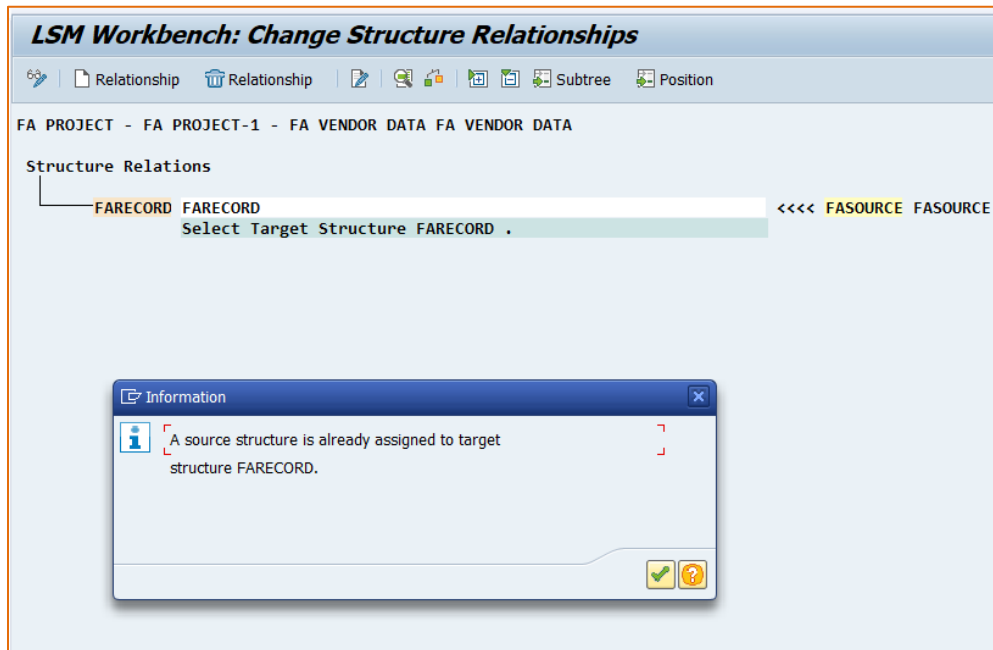
STEP-5

Maintain Field Mapping and Conversion Rules

In this step,we assign source fields to target fields and define how the field contents will be converted.

Field Mapping   Edit   Goto   Extras   Utilities   System   Help

	Check Syntax	Shift+F2
Documentation	Ctrl+Shift+F5
Unassigned Source Fields	Ctrl+Shift+F2
Restore default	Ctrl+F6
Auto-Field Mapping	Ctrl+Shift+F3
Complete X Structures	
Field Documentation	Ctrl+Shift+F1
Possible Values	Ctrl+Shift+F4
Hide and Display Fields/Code	Ctrl+F7

LSM Workbench: Ch...   ...ersion Rules

Source Field Sourc...   Position   Initial   Constant   Move   Fixed Value   Translation

FA PROJECT - FA PROJECT-1

Field Mapping and Rule

FARECORD

Fields

BUKRS   Company Code
EKORG   Purchasing Organization
KTOKK   Vendor account group
ANRED   Title
NAME1   Name 1
LAND1   Country Key
REGIO   Region (State, Province, County)
SPRAS   Language Key
AKONT   Reconciliation Account in General Ledger
FDGRV   Planning group
WAERS   Purchase order currency
ZTERM   Terms of Payment Key

As show in image, we can assign each field to target field and once all assignment done system showing **MAPING COMPLITED** massage

LSM Workbench: Change Field Mapping and Conversion Rules

☐ Source Field 🗑 Source Field 📑 Rule 📝 📑 Layout ℹ️ ❓ 📑 📑 Position 📑 Initial 📑 Constant 📑 Mo

FA PROJECT - FA PROJECT-1 - FA VENDOR DATA FA VENDOR DATA

Field Mapping and Rule 📝

```
📁 FARECORD                    FARECORD                              📝

    📁 Fields

            BUKRS        ℹ️ ❓ 📝 Company Code
                    Source:  FASOURCE-BUKRS (Company Code)
                    Rule :   Transfer (MOVE)
                    Code:    FARECORD-BUKRS = FASOURCE-BUKRS.
            EKORG        ℹ️ ❓ 📝 Purchasing Organization
                    Source:  FASOURCE-EKORG (Purch. Organization)
                    Rule :   Transfer (MOVE)
                    Code:    FARECORD-EKORG = FASOURCE-EKORG.
            KTOKK        ℹ️ ❓ 📝 Vendor account group
                    Source:  FASOURCE-KTOKK (Account group)
                    Rule :   Transfer (MOVE)
                    Code:    FARECORD-KTOKK = FASOURCE-KTOKK.
            ANRED        ℹ️ ❓ 📝 Title
                    Source:  FASOURCE-ANRED (Title)
                    Rule :   Transfer (MOVE)
                    Code:    FARECORD-ANRED = FASOURCE-ANRED.
            NAME1        ℹ️ ❓ 📝 Name 1
                    Source:  FASOURCE-NAME1 (Name 1)
                    Rule :   Transfer (MOVE)
                    Code:    FARECORD-NAME1 = FASOURCE-NAME1.
            LAND1        ℹ️ ❓ 📝 Country Key
```

LSM Workbench: FA PROJECT, FA PROJECT-1, FA VENDOR DATA: FA VENDOR DAT

🔄 User Menu Numbering Off 🔍 Double Click=Display 🔍 Object Overview 📋 Action Log

Process Step	Last Action (Date, Time, User)
Maintain Object Attributes	12.07.2021, 23:22:38 h, AKASHH
Maintain Source Structures	12.07.2021, 23:27:48 h, AKASHH
Maintain Source Fields	12.07.2021, 23:39:46 h, AKASHH
Maintain Structure Relations	12.07.2021, 23:41:21 h, AKASHH
Maintain Field Mapping and Conversion Rules	12.07.2021, 23:46:15 h, AKASHH
Maintain Fixed Values, Translations, User-Defined Routines	
Specify Files	

	Clipboard	⬚	Font	⬚	Alignment	⬚	Number	⬚	Styles	Cells	Editing

| A5 | ▾ | fx | Company Code |

⬚	A	B	C	D	E	F	G	H	I	J	K	L	M
1													
2													
3													
4													
5	Company Code	chasing Organizat	Vendor account group	Title	Name 1	Country Key	State, Province,	anguage Ke	Account in G	Planning group	rchase order cur	erms of Payment Key	
6	1000	Z005	1	Company	Vendor A	DE	A1	EN	160000		EUR	NP30	
7	1000	Z005	1	Company	Vendor B	DE	A1	EN	160000		EUR	NP31	
8	1000	Z005	1	Company	Vendor C	DE	A1	EN	160000		EUR	NP32	
9	1000	Z005	1	Company	Vendor D	DE	A1	EN	160000		EUR	NP33	
10	1000	Z005	1	Company	Vendor E	DE	A1	EN	160000		EUR	NP34	

Untitled - Notepad — □ ✕

File Edit Format View Help

```
Company Code    Purchasing Organization Vendor account group    Title   Name 1  Country Key     Region (State, Province, County)
Language Key    Reconciliation Account in General Ledger         Planning group  Purchase order  currency Terms of Payment Key
1000    Z005    1       Company Vendor A         DE      A1      EN      160000          EUR     NP30
1000    Z005    1       Company Vendor B         DE      A1      EN      160000          EUR     NP31
1000    Z005    1       Company Vendor C         DE      A1      EN      160000          EUR     NP32
1000    Z005    1       Company Vendor D         DE      A1      EN      160000          EUR     NP33
1000    Z005    1       Company Vendor E         DE      A1      EN      160000          EUR     NP34
```

Ln 7, Col 1   100%   Windows (CRLF)   UTF-8

Step 07

Specify Files

Here as show in EXCEL sheet,we are Upload Our File.

Here as show in EXCEL sheet,we are Upload Our File

File on Front End: Maintain Properties

File C:\Users\ABC\Desktop\LSMW 21 D.txt

Name FA LSMW

File Contents
- ● Data for One Source Structure (Table)
- ○ Data for Multiple Source Structures (Seq. File)

Delimiter
- ○ No Separator
- ● Tabulator
- ○ Semi-Colon
- ○ Comma
- ○ Blanks
- ○ Other

File Structure
- ☑ Field Names at Start of File
- ☑ Field Order Matches Source Structure Definition

File Type
- ● Record End Marker (Text File)
- ○ Fixed Rec. Length (Bin.File)
- ○ Hexadecimal Lth Field (4 Bytes) at Start of Record

Code Page
- ● ASCII
- ○ IBM DOS

LSM Workbench: Specify Files (Change)

Display File | File Upload | Subtree | Row

FA PROJECT - FA PROJECT-1 - FA VENDOR DATA FA VENDOR DATA

Files

- **Legacy Data** — On the PC (Frontend)
  - FA LSMW — C:\Users\ABC\Desktop\LSMW 21 D.txt
    - Data for One Source Structure (Table)
    - Separator Tabulator
    - Field Names at Start of File
    - Field Order Matches Source Structure Definition
    - With Record End Indicator (Text File)
    - Code Page ASCII

- **Legacy Data** — On the R/3 server (application server)
- **Imported Data** — File for Imported Data (Application Server)
  - Imported Data — FA_PROJECT_FA_PROJECT-1_FA_VENDOR_DATA.lsmw.read

- **Converted Data** — File for Converted Data (Application Server)
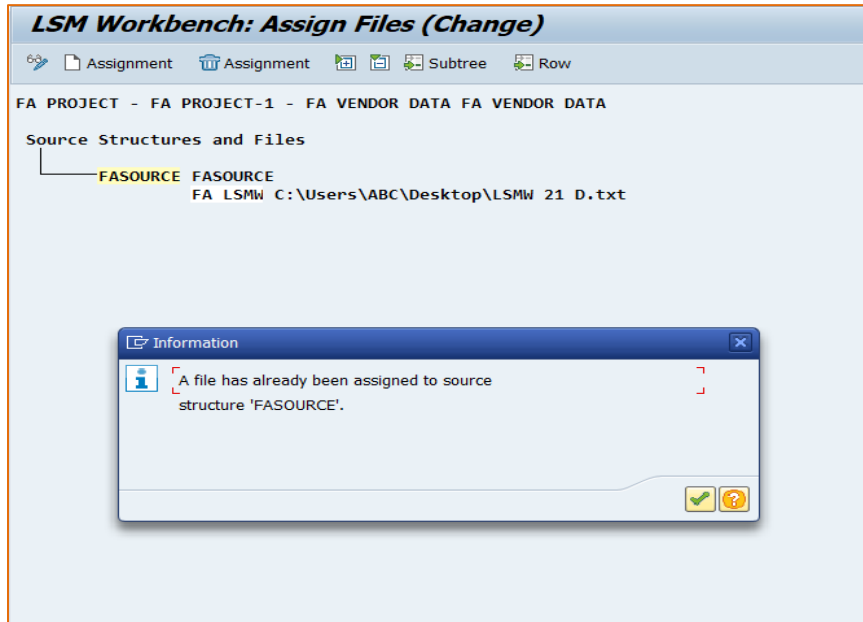 - Converted Data — FA_PROJECT_FA_VENDOR_DATA.lsmw.conv

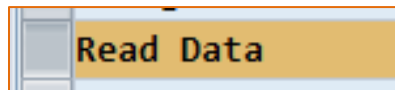- Wildcard Value — Value for Wildcard '*' in File Name
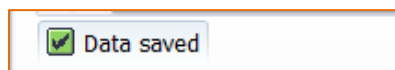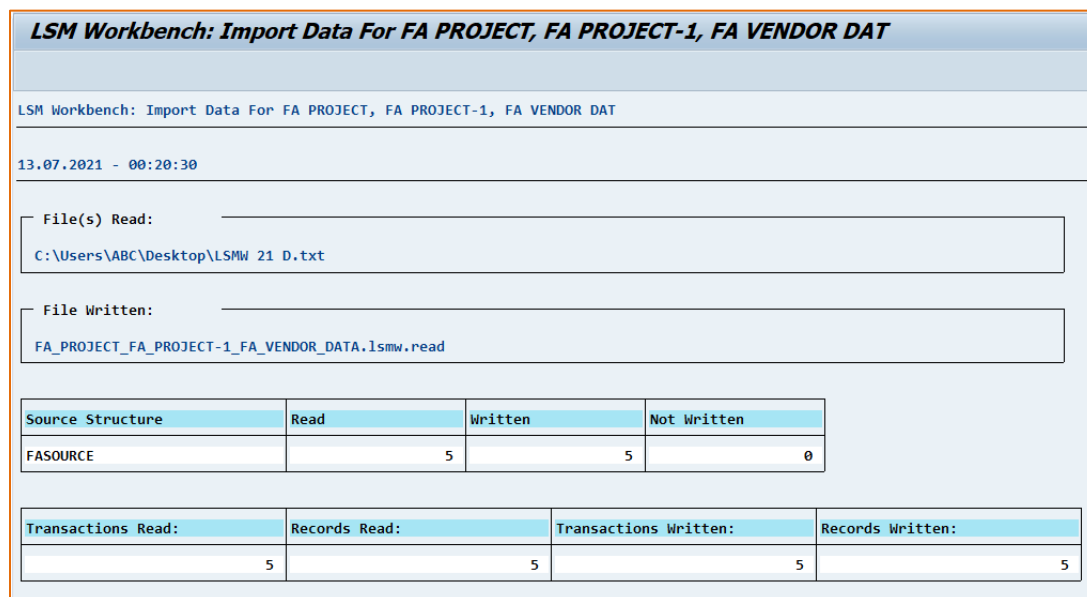

☑ Data saved

Step 08

Assign Files

Here we define which file we are going to use for current upload i.e. whether the file is on Presentation server or application server.

Step 09

Read Data

In this, system read the File which we has uploaded. So system ask for permission so after giving permission system will read Data.

LSM Workbench: Import Data For FA PROJECT, FA PROJECT-1, FA VENDOR DAT

LSM Workbench: Import Data For FA PROJECT, FA PROJECT-1, FA VENDOR DAT

13.07.2021 - 00:20:30

File(s) Read:

C:\Users\ABC\Desktop\LSMW 21 D.txt

File Written:

FA_PROJECT_FA_PROJECT-1_FA_VENDOR_DATA.lsmw.read

Source Structure	Read	Written	Not Written
FASOURCE	5	5	0

Transactions Read:	Records Read:	Transactions Written:	Records Written:
5	5	5	5

Data saved

Step 10

Display Read Data

In the step system Showing all data which we had uploaded.

LSM Workbench: Imported Data

Field Contents

File Contents FA_PROJECT_FA_PROJECT-1_FA_VENDOR_DATA.lsmw.read

Row	Hierarchy Level	Structure	Conts.
		File Information	LSMWFA PROJECT FA PROJECT-1 FA VENDOR DATA ID7 80020210713002613AKASHH
1	01	FASOURCE	1000Z0051 Company Vendor A DE A1 EN160000 EUR NP30
2	01	FASOURCE	1000Z0051 Company Vendor B DE A1 EN160000 EUR NP30
3	01	FASOURCE	1000Z0051 Company Vendor C DE A1 EN160000 EUR NP30
4	01	FASOURCE	1000Z0051 Company Vendor D DE A1 EN160000 EUR NP30
5	01	FASOURCE	1000Z0051 Company Vendor E DE A1 EN160000 EUR NP30

Step 11

Convert Data

In this Step System will Convert all the Non SAP System Data into SAP DATA.

LSM Workbench: Convert Data For FA PROJECT, FA PROJECT-1, FA VENDOR DA

LSM Workbench: Convert Data For FA PROJECT, FA PROJECT-1, FA VENDOR DA

13.07.2021 - 00:27:14

File Read:

FA_PROJECT_FA_PROJECT-1_FA_VENDOR_DATA.lsmw.read

File Written:

FA_PROJECT_FA_VENDOR_DATA.lsmw.conv

Transactions Read:	Records Read:	Transactions Written:	Records Written:
5	5	5	5

☑ Data saved

Step 12

Display Converted Data

LSM Workbench: Converted Data

Field Contents

File Contents FA_PROJECT_FA_VENDOR_DATA.lsmw.conv

Row	Hierarchy Level	Structure	Contents					
1	00	FARECORD	FARECORD	XK01	1000Z0051	Company	Vendor A	DE A1 EN160000
2	00	FARECORD	FARECORD	XK01	1000Z0051	Company	Vendor B	DE A1 EN160000
3	00	FARECORD	FARECORD	XK01	1000Z0051	Company	Vendor C	DE A1 EN160000
4	00	FARECORD	FARECORD	XK01	1000Z0051	Company	Vendor D	DE A1 EN160000
5	00	FARECORD	FARECORD	XK01	1000Z0051	Company	Vendor E	DE A1 EN160000

STEP13

Create Batch Input Session

Once we Execute Batch input, all the converted Data indicated as a **Batch Input.**

LSM Workbench: Generate Batch Input Folder

File Name (with Path)	FA_PROJECT_FA_VENDOR_DATA.lsmw.conv
Display Trans. per BI Folder	
Name of Batch Input Folder(s)	FA VENDOR DA
User ID	AKASHH
☐ Keep batch input folder(s)?	

SAP

> **Information**
>
> ℹ️ batch input folder with 5 transactions created
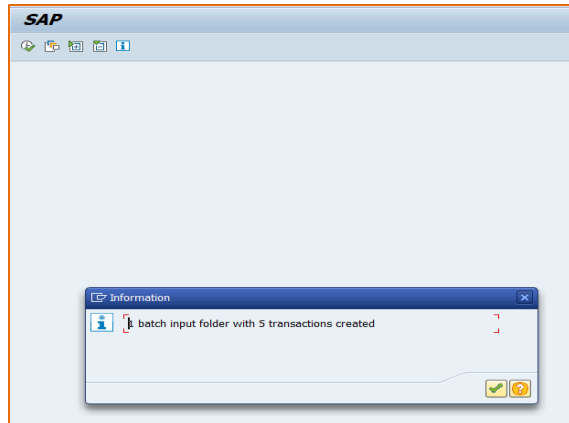
STEP-14

Run Batch Input Session

Batch Input: Session Overview

Analysis | Process | Statistics | Log | Recording

Selection criteria

Sess.: FA VENDOR DA   From: _____   To : _____   Created by: *

| | New | Incorrect | Processed | In Process | In Background | Being Created | Locked |

	Session name	Sta...	Created By	Date	Time	Creation Progr...	Lock Date	Authorizat.	Σ Trans.	⚡	☑	Σ Screens	D..	Queu
	FA VENDOR DA	📄	AKASHH	13.07.2021	00:27:55	/SAPDMC/SAP...		AKASHH	5	0	0	25	✓	210

> **Here we can run batch input**

Create Vendor: Initial Screen

Vendor	
Company Code	1000
PurchasingOrganization	Z005
Account group	0001

Reference

Vendor	
Company code	
PurchasingOrganization	

☐ Use central address management

Create Vendor: Address

🔃 📤 ℹ️ CIN Details

Vendor   INTERNAL

Address

Title	Company		
Name	Vendor A	Search term	
Street		PO Box	
City		Postal Code	
District			
P.O.Box city		PO Box PCode	
Country	DE	Region	

Communications data

Language Key	EN	Telex number	
Telephone 1		Fax Number	
Telephone 2		Teletex number	
Telebox		Data line	
InternetAdd.			Home Page

Create Vendor: Accounting information Accounting

🔃 📤 ℹ️ CIN Details

Vendor   INTERNAL   Vendor A
Company Code   1000   BestRun Germany

Accounting information

Recon. account	160000	Sort key	
Head office		Subsidy indic.	
Authorization		Cash mgmnt group	A1
		Release group	
Minority indic.		Certificatn date	

Interest calculation

Interest indic.		Last key date	
Interest cycle		Last interest run	

Withholding tax

Here we can see as per data migration vendor has been created

Vendor 300480												·	1
Vendor A	DE		0001				Z005	FA PurchOrg	NP30		0,00	EUR			1
Vendor 300481												·	1
Vendor B	DE		0001				Z005	FA PurchOrg	NP30		0,00	EUR			1
Vendor 300482												·	1
Vendor C	DE		0001				Z005	FA PurchOrg	NP30		0,00	EUR			1
Vendor 300483												·	1
Vendor D	DE		0001				Z005	FA PurchOrg	NP30		0,00	EUR			1
Vendor 300484												·	1
Vendor E	DE		0001				Z005	FA PurchOrg	NP30		0,00	EUR			1

Thanks & Regards,

Akash Hiwale

akashhiwale20@gmail.com