

LSMW

Legacy System Migration Workbench



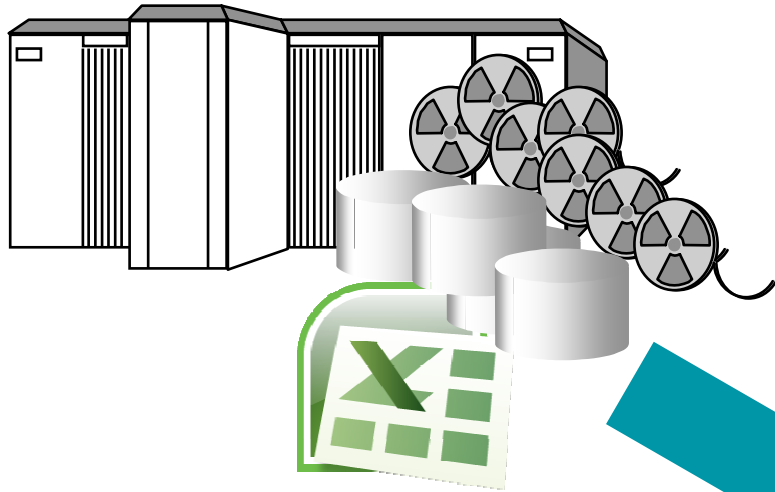
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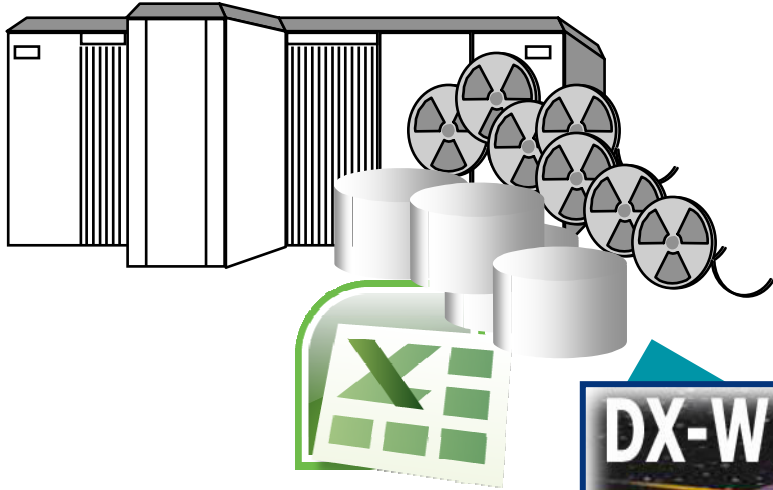


Legacy system



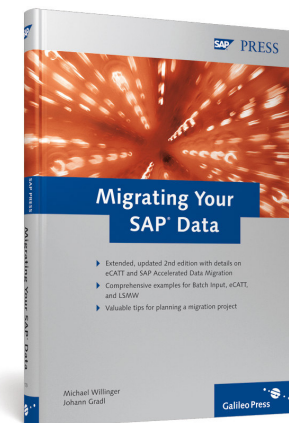


Legacy system



Legacy System Migration Workbench (LSMW)

- Transaction code **LSMW**
- SAP Application area **BC-SRV-DX-LSM**
- Service Marketplace quick link: /lsmw
<http://service.sap.com/lsmw>
- Customer Training “Data Transfer”
(Course **BC420**)



- *LSMW is part of the WebAS with SAP Basis release 6.20 and higher*

Tool: Legacy System Migration Workbench



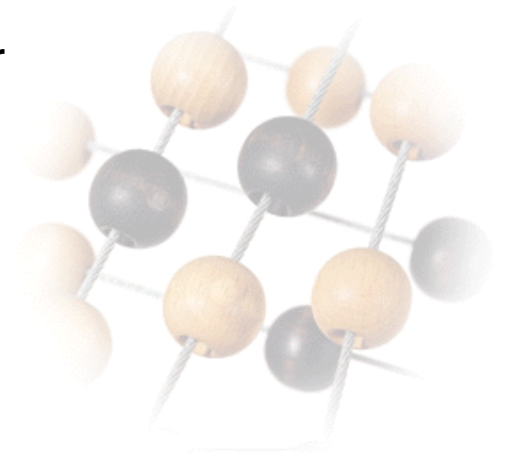
Migration workbench for initial and periodic data transfer from non-SAP systems to an SAP system

Idea:

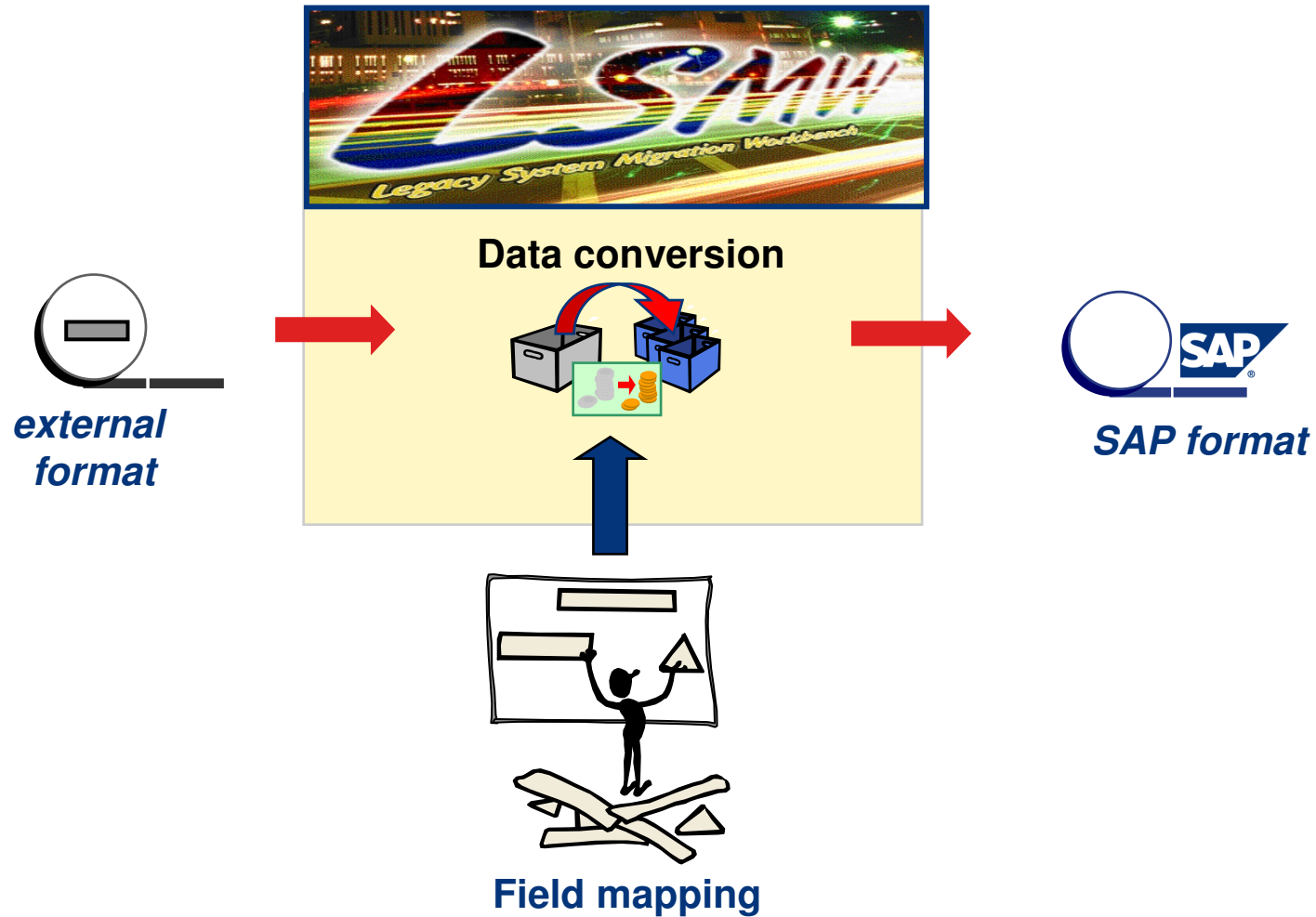
- Transfer data objects instead of data base tables
- Reusable Mapping
- Ensure data consistency

Features:

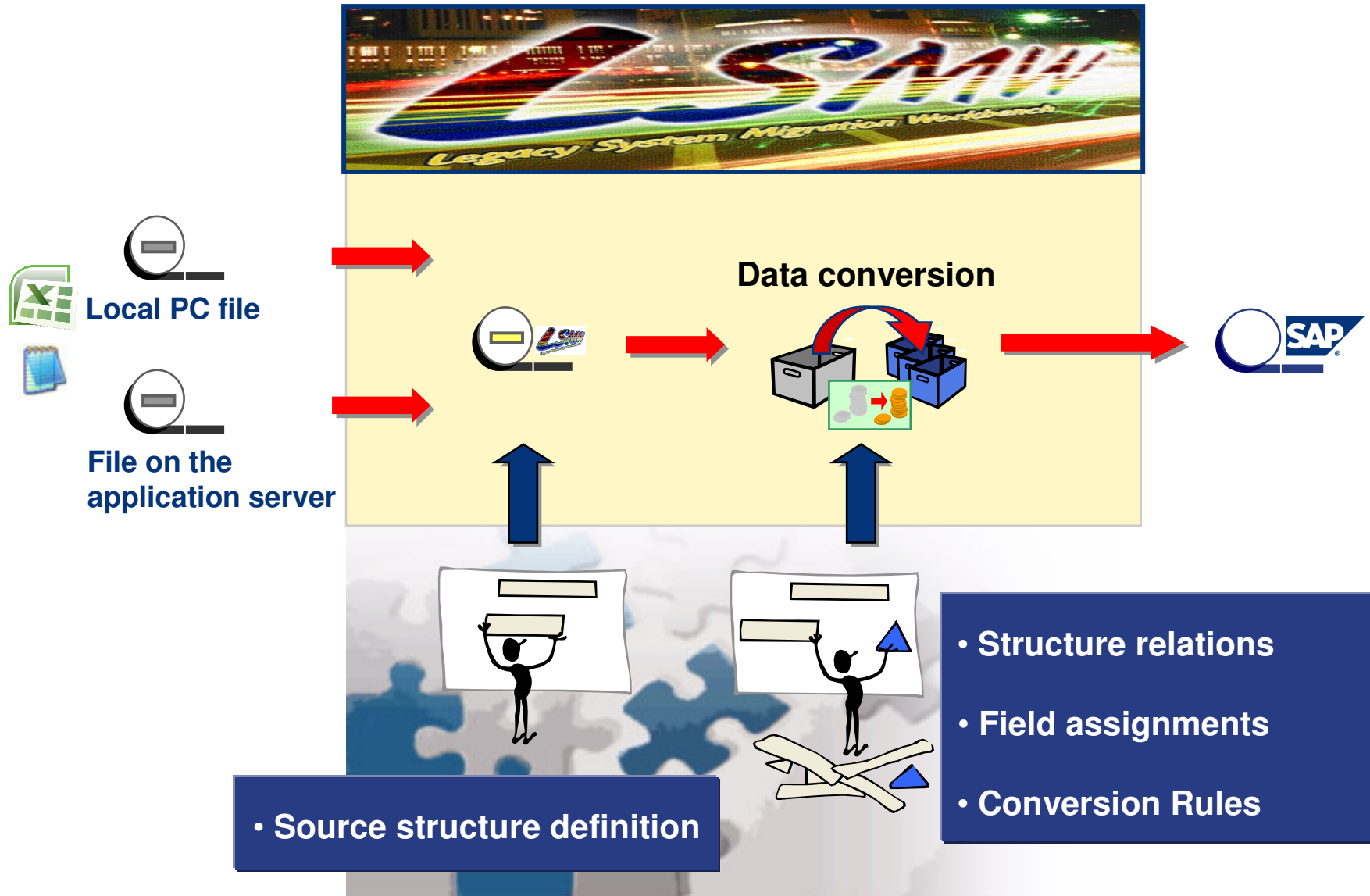
- Integrated Transaction Recorder
- Consistency check against the customizing
- Support of the below SAP standard import techniques:
 - Batch Input programs (including own recordings)
 - Direct Input programs
 - BAPIs
 - IDocs



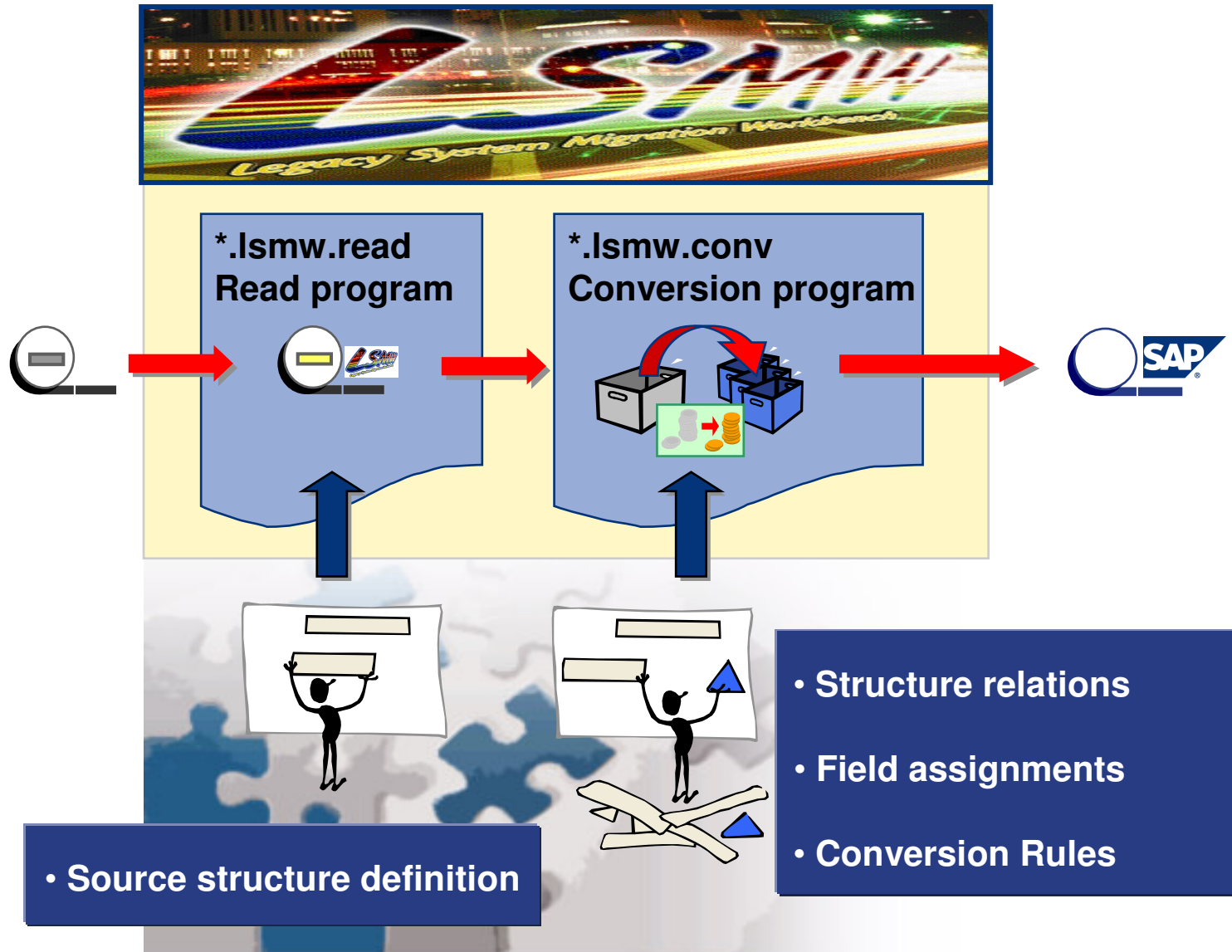
Convert Data with LSMW



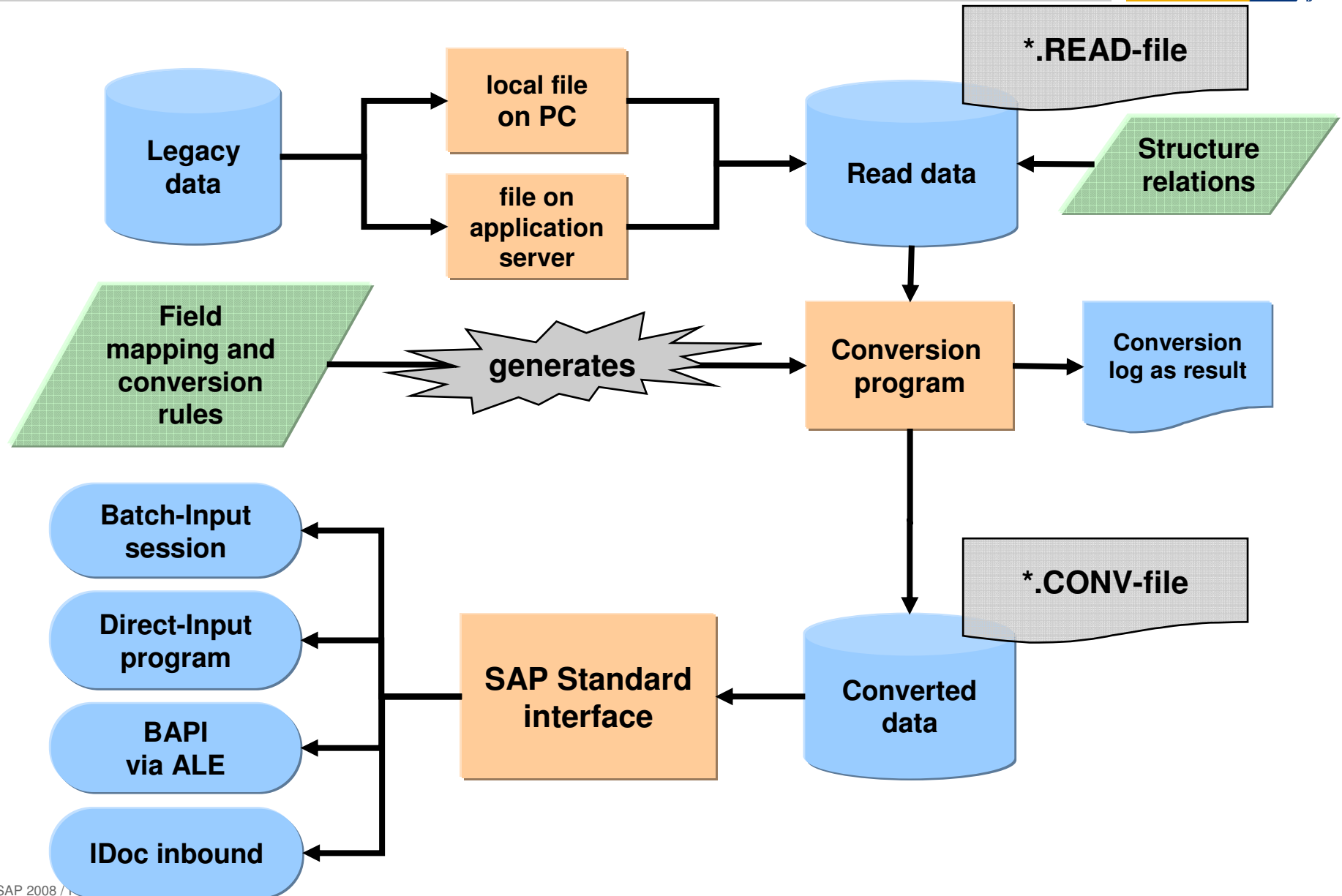
Convert Data with LSMW in detail



Convert Data with LSMW: Program generation



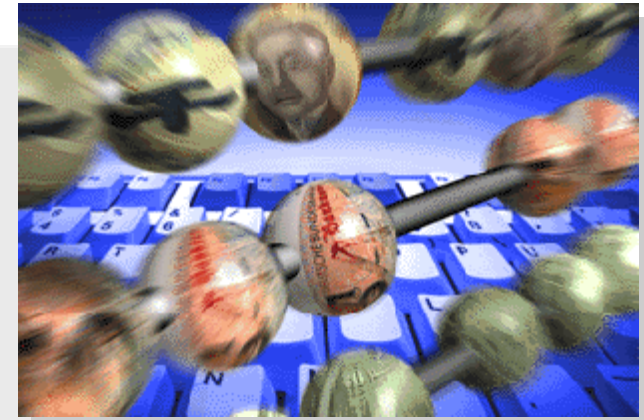
How LSMW works: The technical point of view





- Initial value
- Constant
- Assign (“MOVE”)

D ⇨ DE
A ⇨ AT
F ⇨ FR



Reusable

- Fixed value
- 1:1 translation
- Translation via intervals
- User-defined routines

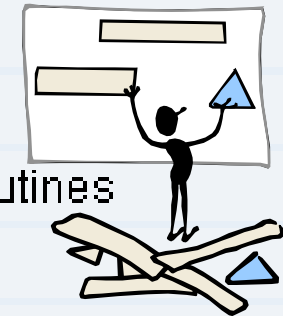
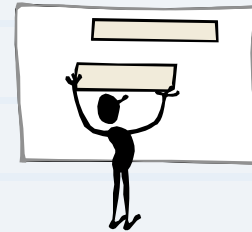
001...100 ⇨ 10
101...200 ⇨ 20
201...300 ⇨ 30

- Prefix
- Suffix
- Concatenation
- Individual ABAP coding



Process Step

- 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



What kind of data can be read?



- Data from spreadsheet-based applications
- Any data from flat files
- Text files, csf-files, csv-files etc.
- Data from host systems on SAP application servers
- Fixed record length, end of record indicator or hexadecimal length field at the beginning
- With and without separator
- Different non-Unicode code pages, Unicode
- Hierarchical data in multiple files (relational structures, tables from relational data bases)
- Hierarchical data in one flat file with “identifying field values”

→ All data where an interface exists

■ Standard Batch Input, Standard Direct Input

- Precondition: Application program given
- Entries in SXDA* tables

■ Batch Input Recording

- Recording a transaction
- Flat target structure (no header-position constellations with variable amount of positions)

■ Methods for Business Objects („BAPIs“)

- All BAPIs for which an ALE-IDoc interface has been generated and released (by SAP development)
- All BAPIs for which an ALE-IDoc interface is generated and released by customer (using transaction BDBG)

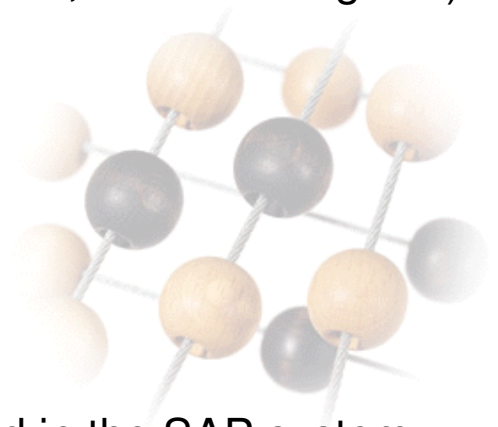
■ IDocs

- All released IDocs

Advantages and strengths at a glance



- Part of SAP and therefore platform-independent (LSMW is part of SAP NetWeaver)
- Wide range of data conversion techniques (fixed values, translation, ABAP coding etc.)
- Migration customizing: no literals in rules
- Conversion program generated from conversion rules
- User guidance: Data migration in 14~20 steps
- Interface for data in spreadsheet format
- Check against SAP Customizing before processing the import
- Free of charge for SAP's customers and partners as it is included in the SAP system
- Migrated data in SAP is consistent
- User friendly
- Only basis ABAP knowledge necessary
- In most cases only few programming has to be done
- Supports data transfer for the most important master and transaction data
- Built-in codepage conversion
- Usable in combination with SAP Data Migration Workbench (DX Workbench, SXDA)



What LSMW can do (1)



- Organize the data migration project
 - project, subproject, object
- Document the data migration project
- Define data conversion per object
 - Select target
 - Business Object (e.g. customer master, material master)
 - Method (e.g. create, change)
 - Import technique (e.g. Batch Input, IDoc)
 - Define source
 - structure of the source data (segments, fields, file attributes etc.)
 - Define relations
 - between source and target (SAP system) on record level and on field level
 - Define rules
 - transfer of field contents

What LSMW can do (2)



- Read data (technical conversion)
- Convert data (conversion of values)
- Import data
 - With a standard import technique
 - Batch Input
 - Direct Input
 - Method for a Business Object (“BAPI”)
 - IDoc technique
 - This means:
 - LSMW does not write data into the data base tables of the applications
 - precondition for the use of LSMW is the availability of a data transfer interface in the SAP application
- Transport the data migration object
 - Via download and upload
 - Via SAP transport system

What LSMW cannot do



- Extract data from the legacy system
- “Outbound”: Transfer data from SAP into another system
- Work with XML-files

Examples of positive feedback



- “... Just wanted to let you know us here at ... We are very pleased with the LSM product. We are using it for most of our conversions and have found it to be of tremendous help and quality. ...”
- “The LSM Workbench saved the day. Without it, we would never have been finished on time.”
- “...in our opinion, the major benefit is LSM’s flexibility, which allows us to respond very quickly to changing requirements...”
- “...within two and a half hours, we managed to generate our own migration object for the material master transfer, and successfully migrate the material masters from the EXCEL sheet. It was a complete success! ...”
- “...the transfer of master data on June 12, and of the open items on June 19, meant that we could go live the same day.”
- “...I used the LSMW to transfer customers and creditors, and I was really impressed by how fast and flexible it was! Fantastic! ...”

Thank You!

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