



## **Migration with LSMW and DX-Workbench**

January 28, 2003

## 1 General Tips for the Procedure in a migration using LSMW and DX-Workbench

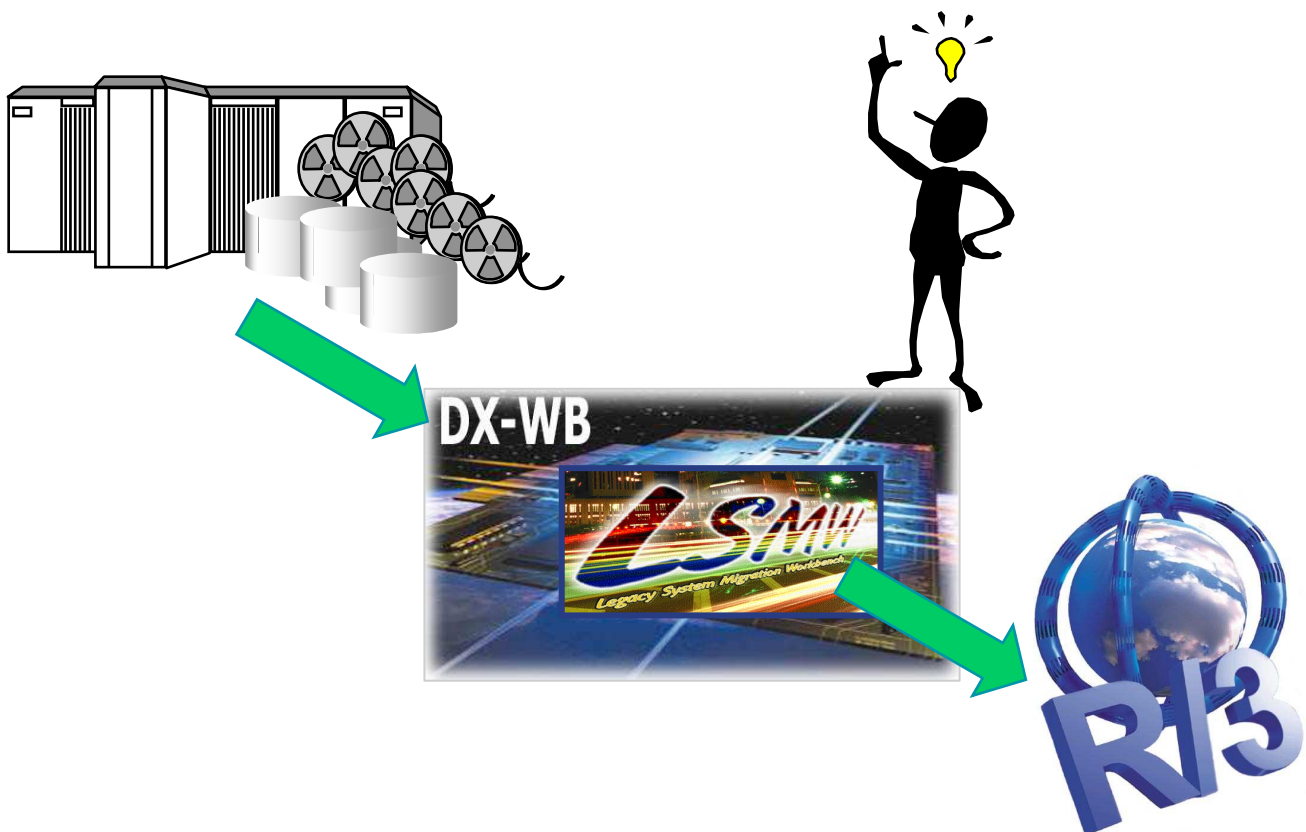
The LSM Workbench / DX-Workbench is a tool that supports the transfer of data from non-SAP systems to R/3.

Core functions of the LSM Workbench:

1. Import data from a legacy system
2. Converting data from its original (legacy system) format to the target (SAP) format
3. Importing the data using the standard interfaces of SAP (IDoc inbound processing, batch input, direct input)

Core functions of the DX Workbench:

1. Data import
2. Monitoring for data import
3. Create and edit test data
4. Restart functionality



### LSMW and DXWB should be used in combination

#### ➔ Recommendation

- For batch input / direct input: use the test functionality in DX-Workbench and run the whole import process from LSMW
- For BAPI / IDoc: use DX-workbench and do mapping and conversion via an LSMW object – LSMW can be called from DX-workbench as a task (from 4.6C on)

Before using the LSM Workbench or DX Workbench, you need a **concept** for data migration.

## 1.1 R/3-Customizing

- Make sure that the **Customizing** of your SAP system is finished.
  - The "ideal project":
    - First finish customizing
    - Then, run data migration

## 1.2 Which data should be migrated?

Analyze the data existing in the legacy system to determine which data will be needed in the future (also from a business-operational point of view).

## 1.3 Run the manual process

- Identify the transaction(s) in R/3 you want to use for bringing the data into the SAP System. Here, it may also be relevant whether the data is required for statistical (evaluation) purposes or for further processing in the system.
- Test the relevant transaction in R/3 manually with test data from the old system and make sure that all required fields are filled. There may be required fields that do not correspond to any data window in the legacy system. In such a case, assigning a fixed value or defining the field as optional for data transfer may be appropriate.
- Get acquainted with the terminology of the relevant data object.
  - E.g. XD01: Create customer master (see also the F1 help)

## 1.4 Which import technique will be used?

- Check the interfaces provided by the application. Is there a batch input program and an IDoc (for example)? You might have a look at the program library in the DX-Workbench at this point. Which method should be used in your project?
- In case of very small data quantities, it may be easier to carry out the transfer manually.
- With very large data volumes, however, batch input technology may lead to excessively long runtimes. Rough estimate for the required time: 10000 records per hour; this value, however, may vary strongly depending on the hardware.
- Batch input sessions are 'easy' in postprocessing
- Is a recording needed? Decide whether you want to use an existing import program (batch input, direct input, BAPIs, IDocs) or a recording:
  - Advantages of standard migration objects:
    - Includes screen sequences that may vary (e.g. with different material types)
  - Advantages of recordings:
    - Smaller number of target fields
    - Available for almost every transaction

## 1.5 Create the recording

- If you use a recording: Record the transaction and process the recording.
  - Specify
    - Field names
    - Field description

- Default values

## 1.6 Determine the source structures

- Determine the source structures and fields
- Is the export done into multiple files or into one sequential file?
- Note: LSMW or DX-Workbench do not do exports
- Define the **record structures** of the legacy data and introduce them to the SAP system.
  - Case 1: Data is available in one or more files.
    - Introduce these structures to the SAP system.
  - Case 2: Data (still) resides in the legacy system and the legacy system provides a function for exporting the data.
    - Introduce this (these) record structure(s) to the SAP system.
  - Case 3: Data (still) resides in the legacy system and the legacy system **does not** provide a function for exporting the data..
    - Define the record structure of the data you need.
    - Export this data by means of a program to be written in the legacy system.
    - Introduce this (these) record structure(s) to the SAP system.

## 1.7 Create test data in DX-Workbench

Via 'Goto -> Analyze files and data structures' you get to a transaction where an example import file can be created to test the import. This file can be filled manually for test purposes. For most of the business objects you have the possibility to create a test file out of data already posted in the SAP system.

## 1.8 Mapping on paper

- Develop a mapping plan in written form: Assign the legacy system fields to the SAP fields. A printed object overview from LSMW might help at this point.
- Determine the form (e.g. via „MOVE“ or assigned according to a rule) in which the legacy system data shall be transferred to the SAP System.
- If applicable, define the allocation rules (LSM-internal name: „translation rules“).

## 1.9 Enter the rules and test out of LSMW

- Enter the rules and test steps reading and converting out of LSMW
- **Read data** – automatically by pushing a button
- **Convert data**
  - The left column of the translation table is filled automatically, if this was set accordingly in translation control.
  - A sequential file is created.
- Maintain the **reusable rules**:
  - Maintain the translation tables (F4 help for right-hand column).
  - Specify your fixed values.
- Maintain the translation tables and generate a new conversion. Please note: at this point the processing steps are not sequential.

## 1.10 Create project, subproject and run in DX-Workbench

Create project, subproject and run in the DX-Workbench und define the tasks, for example:

1. task: mapping and converting
2. task: import

For task mapping and converting the migration object created in LSMW can be called; the import is done with the output file of LSMW (xxx.lsmw.conv)

## 1.11 Import the data

Start the run in DX workbench

- Depending on the object type:
  - Batch input / recording:
    - Generate batch input session.
  - Run batch input session.
  - Direct input
    - Start direct input session.
  - IDocs / BAPI:
    - Transfer converted data to IDoc inbound processing.
    - Check inbound processing.