

APPLICATION MIGRATION / DATA MIGRATION

EFFECTIVE, FAST, SECURE

AMM – Application Migration Management

The special tool for safe migrations of complex application data



The way of
innovation

INHALT

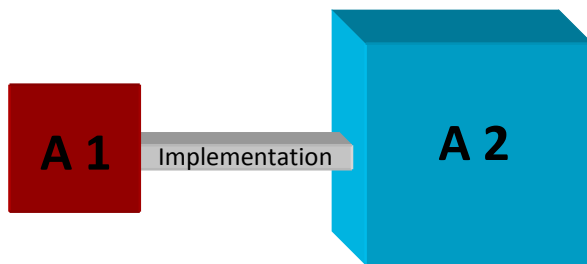
1	Application migration – what is that? *)	2
2	The task	3
3	The challenge.....	4
4	The solution.....	5
5	Benefits of AMM.....	6
6	Contact	6

1 APPLICATION MIGRATION – WHAT IS THAT? *)

The dynamic of today's business processes and constant change in the business landscape i.e. through mergers and takeovers leads to insufficient and obsolete information technology, which isn't the optimal solution for current business processes.

Old systems are replaced and their information has to be migrated into the new systems. Thereby complex conversion of data and structure is necessary.

After such a migration the new application has to flow – with its new data – as good as the old application did.



The old application system (A1) has been replaced with a new one (A2). To now complete the tasks with A2, which were completed with A1, data has to be implemented correctly from A1's storage to the databases of A2.

*) Definition of IT-migration types:

- 1) Application migration: Data is being transformed during the transport from an old storage system to a new storage system, which are mostly databases. Structurally and with regards to content, the data has to be processed with the functionalities of the new application systems. After implementation the functionality of the old system has to be sustained in the new system.
- 2) Data pool migration: different pools of data are migrated individually. There is no need of synchronizing the data pools.
- 3) Data migration: Data is being migrated between systems, without changing the data itself.
- 4) Software migration: Software is being migrated between different operating systems or system environments, without changing their functionality. After a software migration is completed a data migration often has to follow.
- 5) System- or hardware migration: the migration from existing systems to new hardware presents the same challenges like a pure software migration. In such cases a successive data migration is avoided.

2 THE TASK

The main task of an application migration is to bridge functional differences between old source- and new target systems.

Because of subject-specific application needs, it is crucial to activate the respective departments for the conception of the new application. A **professional analysis** is only possible with the consolidated knowledge of skilled workers. Based on this analysis, the function of specific data in the old system is determined and new functions, which fulfill these duties, are being defined. The professional analysis is followed by a **business concept**. It's a description of functionalities, which is necessary for the implementation of information in new applications.

Next, the semantic speech differences between the skilled department workers and the IT professionals have to be accommodated. This is how a **transition concept** is created, whose guidelines are used to transform data into a workable form.

The inevitable changes within the migration functions are done in a clear, comprehensible and revisable way to avoid chaos.

If stand-alone tests are completed satisfactory, a **test** with all data can be run. All source data is being implemented into the structures and data of the target system. The productive adoption follows the successful completion of the test phase.

Such migration tasks are very complex, time consuming and personnel-intensive – if you don't have the right tools and experience.

3 THE CHALLENGE

IT specialists warn of the underestimation of application migration projects.

The results of those projects are often incomplete transformation rules, high programming costs, extended project runtimes and project abortions, stressed workers and overgrowing budgets.

Because migration projects are very seldom, there often is a lack of experience. In addition any migration is unique. This means that one transformation is practically never done twice. Even if the same old applications are implemented into common new systems, the existing differences in data have to be considered.

Application systems and their data change consistently. If such a system is very old, there is only a slim chance of someone who knows the systems functionality. Therefore most transition concepts, which are used for the mechanical transition in medium and large systems, are often incomplete.

Often communication issues occur between different other departments and the IT department because of the huge amount of changes and sketchy transition concepts. Such communication issues are often the reason for project delays.

But it is extremely important to have the freedom to invest enough time into tests. Because tests reveal unknown issues in source systems and target systems. Often times, unregarded combinations occur if data is loaded into the target system. Such issues have to be corrected.

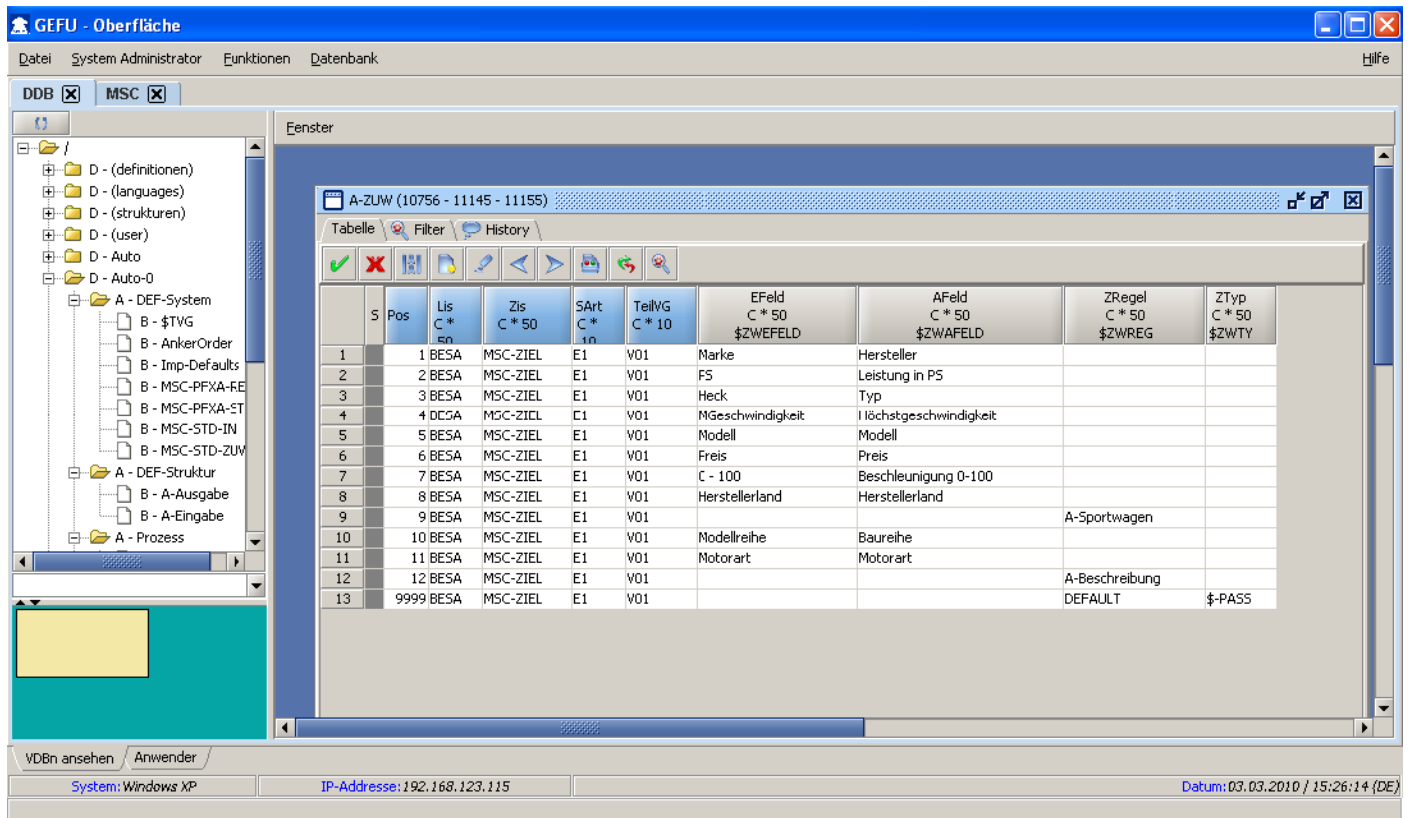
The lack of experience in data migration projects, communication issues between different departments and the IT department and the therefore created pressure of time are the main challenges which can turn into serious problems during a migration project.

4 THE SOLUTION

AMM (Application Migration Management) produces relief.

After a quick training users are able to produce application flows and migration rules with AMM all by themselves. No knowledge of programming is necessary during the whole migration project.

Early after the first entries users are able to run their created processes easy and fast at the push of a button. They define projects through the comfortable user interface (see figure) and divide them into dedicated processes and further modules. Only a few modules have to be defined to run tests.



The screenshot shows the GEFU - Oberfläche software interface. The main window displays a table of migration rules for a project named 'A-ZUW (10756 - 11145 - 11155)'. The table has columns for S, Pos, Lis, Zis, SArt, TeilVG, EFeld, AFeld, ZRegel, and ZTyp. The data rows are as follows:

S	Pos	Lis C * 50	Zis C * 50	SArt C * 10	TeilVG C * 10	EFeld C * 50 \$ZWEFELD	AFeld C * 50 \$ZWAFFELD	ZRegel C * 50 \$ZWREG	ZTyp C * 50 \$ZWTY
1		1 BESA	MSC-ZIEL	E1	V01	Marke	Hersteller		
2		2 BESA	MSC-ZIEL	E1	V01	FS	Leistung in PS		
3		3 BESA	MSC-ZIEL	E1	V01	Heck	Typ		
4		4 DEGA	MSC-ZIEL	E1	V01	NGeschwindigkeit	l höchstgeschwindigkeit		
5		5 BESA	MSC-ZIEL	E1	V01	Modell	Modell		
6		6 BESA	MSC-ZIEL	E1	V01	Preis	Preis		
7		7 BESA	MSC-ZIEL	E1	V01	C - 100	Beschleunigung 0-100		
8		8 BESA	MSC-ZIEL	E1	V01	Herstellerland	Herstellerland		
9		9 BESA	MSC-ZIEL	E1	V01			A-Sportwagen	
10		10 BESA	MSC-ZIEL	E1	V01	Modellreihe	Baureihe		
11		11 BESA	MSC-ZIEL	E1	V01	Motorart	Motorart		
12		12 BESA	MSC-ZIEL	E1	V01			A-Beschreibung	
13		9999 BESA	MSC-ZIEL	E1	V01			DEFAULT	\$-PASS

Integrated support, i.e. mapping of transmissions, checks of completeness, pre-assembled jobs and processes ease the way and promote fast process.

The high rate of change in migration projects is no challenge for AMM-users. All necessary modifications can be made by ones's own hand and tested through instant processing.

5 BENEFITS OF AMM

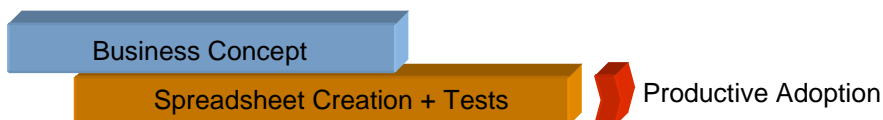
- No additional programming during the whole data migration project
- Great time saving through acceleration of the whole migration process
- Great cost reduction through less requirements in manpower
- Safety, transparency and a consistent approach through the course of the project
- Further advantages:
 - Fast results through processing at the push of a button
 - Fast changes through an easy comprehensible user interface
 - Secure error analysis through high data transparency
 - Automated and clean documentation of all job steps

Projects in comparison of time

Conventional data migration



Data migration with AMM



6 CONTACT

gefu – gesellschaft für unternehmensinnovation mbh

Phone: 07031-76650 – Fax: 07031-766565 – E-mail: mail@gefu-gmbh.de

URL: www.gefu-gmbh.de