REFERENCE

BAVARIAN STATE MINISTRY FOR HOUSING, BUILDING AND TRANSPORT (StMB)

Test data that is also suitable for special cases

Industry
Public Administration

Software
Libelle Data*Masking*

Hardware
HPE DL-Server

Application
SAP S/4HANA®
SAP ERP
SAP® BusinessObjects™
SAP PO
SAP ICM
OpenText
HaSta (Specialised procedure based on SAP FIORI®)

2023

CHALLENGE

A complex IT environment with two SAP S/4HANA® instances at the centre requires variant-rich data for development and testing that matches production data, but also meets GDPR requirements. Numerous special cases in the data and specialised procedures had to be taken into account. Approximately 4,000 named users access the IT applications in the respective specialised procedures.

SOLUTION

Libelle Data*Masking*

SUCCESS

The introduction of Libelle Data*Masking* has provided the StMB's IT department with realistic but anonymised data in the development and test environment. New developments, patches and software tests can be carried out with the test data generated by Libelle Data*Masking* without having to fear surprises in productive operation.

One challenge was the „special case of documents". To deal with this, Libelle has developed a flexible solution that allows unwanted documents to be removed from the test data.

> ## Through ‚minimally invasive' interventions, we achieve complete and untraceable anonymisation of complex data structures.

Stefan Bregenzer
Referent
Landesbaudirektion Bayern

The Free State of Bavaria supports the provision of housing for its citizens through a variety of measures. These measures are administered by the Bavarian State Ministry of Housing, Construction and Transport (StMB), which was newly established in 2018.

The StMB is responsible for all areas of construction and transport, as well as the promotion of housing and urban development in Bavaria. The ministry is also responsible for the state-owned construction, real estate and housing companies as well as the property management of the Free State.

— Challenge

Ensure the smooth operation of specialised procedures: Providing test systems with variant-rich data

At their core, all tasks and the associated IT platforms and applications revolve around HaSta, the central budget procedure of the StMB and its subordinate administrative authorities, in particular the State Building Authorities and the State Building Directorate. Whether it is the state's major construction projects, the invoicing of architects' services for a renovation or the exchange of information with offices, the tasks are diverse and subject to a special feature – the procedures and reporting obligations of an authority. HaSta is the special procedure for the entire state building administration. It is an in-house development of the Bavarian State Building Authority based on SAP. The approximately 4,000 named users experience HaSta as a standardised web application. It was developed using SAP FIORI® technology.

SAP S/4HANA® is at the heart of the specialized procedure. All data accessed by HaSta and the associated business processes are consolidated there. The underlying HPE DL servers are operated by an official service centre. An IDM system manages roles and permissions. SAP® BusinessObjects™ provides analysis and reporting, and an OpenText implementation supports document processing.

Other and specialised applications are controlled by SAP Process Orchestrator.

A development and a test/quality assurance environment are required to ensure that the IT production environment runs smoothly and can be updated regularly. In order to perform the tests correctly – to ensure that the specialised procedures run smoothly – the test systems need data with a wide range of variants that are as close as possible to the production data. However, the requirements of the GDPR (General Data Protection Regulation) prohibit the direct use of production data as test data, even though this would certainly make sense.
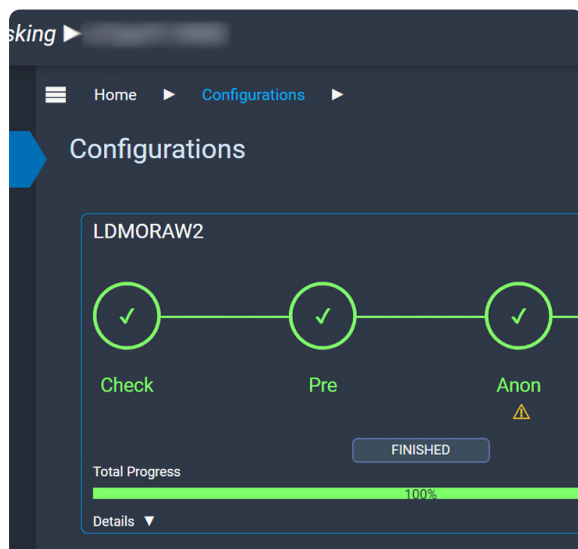
There are basically two large complexes of data. On the one hand, there is all the personal data of the employees. On the other hand, there is business data on all construction projects in the country, payment histories, account data, personal data on suppliers and data from the materials budget, for example all office supplies. The factual data itself is also very complex. Among other things, a lot of individual information is stored for each construction project. This also forms the basis of the SAP HANA® environment.

— Solution Approach

Complete, anonymised data for clean testing with Libelle Data*Masking*

In theory, several solutions were considered. To comply with GDPR requirements, the group of people could have been restricted or complex certifications could have been set up for access to the sensitive data. This approach proved not to be legally compliant and was immediately discarded. Another option was the development of a custom software solution. An initial cost estimate showed that this was neither realistic in terms of time nor cost-effective for the taxpayer.

Stefan Bregenzer, consultant at Landesbaudirektion, reports: „Anonymisation was part of the famous ‚uncharted territory' for us. That's why we invited all relevant providers of anonymisation solutions for SAP S/4HANA® environments. From this list, Libelle was able to „stand out from the crowd". One feature was that Data*Masking* also anonymised data that was not stored in the SAP environments. „Not many vendors could do that. What's more, unlike some other solutions, Libelle **Data***Masking* can be implemented in a minimally invasive way, so to speak," says Bregenzer. Many specialised procedures access this data from very different areas, including analysis with SAP® BusinessObjects™. This, of course, places complex demands on the data for the development and test systems. They need to match the complexity of the applications. SAP® BusinessObjects™ is used to analyse the information in the SAP HANA® database, for example for the budget monitoring list of the ministry

DataMasking** without having to fear any surprises during productive operation.

The realisation that a technical solution was needed was quickly accepted by all parties involved. The Libelle **Data**Masking* software has the great advantage that it is not limited to the SAP environment.

☰ Libelle Insights

Significant reduction in staff and administration time
Libelle **Data**Masking* fulfils the tasks expected by the user. Unlike other solutions on the market, Libelle's software runs almost automatically. There is no need for follow-up work, such as checking that all tables in the IT environment have been completely anonymised. This saves the Bavarian State Ministry for Housing, Construction and Transport (StMB) additional personnel and administrative work.

The SAP S/4HANA® databases and the databases of the associated specialist applications can be automatically and regularly anonymised for the development and test environment using Libelle **Data**Masking*. This eliminates the need for administrative steps such as authorising external software developers.

and its subdivisions. Stefan Bregenzer explains: „Experience has also shown that it is not advantageous to prepare only partial areas for test data. For clean tests, complete but anonymised data is simply the optimum". Generated test data would have been too unreliable for many procedures. In government, there are often processes that have a „batch size of 1", i.e. the data is only needed for a specific, specialised procedure. Data generation solutions are usually unable to generate data in the correct structure and syntax for special cases.

„We carry out practical case studies during development and patches and test them in the process. The tests in the load test system and the testing of special cases are particularly exciting at the moment," says Bregenzer.

The anonymisation of the data is virtually automatic and does not require time-consuming post-processing, as is often the case with built-in tools from database vendors and sometimes with solutions from other vendors. Bregenzer explains: „With Libelle **Data**Masking*, we can automatically create a completely anonymised copy of the production data for development and test purposes on a weekly basis."

The installation was carried out by the Libelle experts in a very short time. One challenge was the „special case of documents", the internal nickname for a customisation. Libelle quickly developed a solution to remove certain documents from the test data.

☰ Success

Optimised test data. Not only for SAP environments
With the implementaion of Libelle **Data**Masking*, realistic but anonymised data is available in the IT development and test environment of the StMB. New developments, patches and software tests can be carried out with the test data generated by Libelle

Would like to learn more?

Get in contact

Libelle AG
T +49 711 / 78335-0 I libelle.com