



## Ivory CASE STUDY

LBBW, one of the largest banks in Germany, improves employee productivity and customer service with sophisticated access to mainframe applications and information with GT Software's Integration/Orchestration Solution.

Landesbank Baden-Württemberg (LBBW), the fifth largest bank in Germany, provides commercial banking and trading services under its own brand as well as delivers bank processing and trading services for small banks throughout Germany. LBBW needed to update its stock trading systems and interfaces. Like so many banks, LBBW was finding its IMS-based “green screens” were inadequate to support the business initiatives it needed for itself and those of the private label banks they supported.

### CHALLENGE

#### Integrate Information/Modernization Solutions on Mainframe Applications

LBBW, which was running WebSphere<sup>®</sup>, wanted to weave all of the disparate IMS mainframe applications together and make the various data accessible through a more modern interface. The project was laced with several challenges. Specifically:

- Re-writing the existing business logic was considered too complicated and time-consuming.
- Their current securities order management system was written in COBOL and consisted of several thousand programs, developed and extended over many years.
- The online interface was based on an extensive central system component, which was multi-functional and highly complex, serving not only customer advisors, but also providing back office services.
- The solution had to be easy to use. LBBW did not want its staff to dedicate massive training efforts for the project.
- The solution had to enable the creation of multi-step, multi-operational composite services.
- The solution had to demonstrate high levels of reliability and robust performance.

#### CLIENT

LBBW  
Landesbank Baden-Württemberg

#### INDUSTRY

Banking

#### HQ

Stuttgart, Germany

#### CHALLENGE

Needed to unify disparate IMS mainframe applications and make accessible through modern technology

#### SOLUTION

Integration/Orchestration Solution

“ Our expectations of Ivory Service Architect were well exceeded. Our initial requirements for this project were met early on and the GT Software team continues to help our development team reach new heights when it comes to transforming our SOA initiatives. ”

Hans -Jürgen Bäuerle  
LBBW Development

## SOLUTION

### Easy-to-Use Means Easy-to-Meet-Deadlines

Recognizing that they did not want to simply convert the existing green screen line mode into a graphical representation, tool scrapers were not an option, and an in-house solution could not meet the tight implementation deadline. LBBW turned to GT Software's Ivory® Service Architect™ to enable its developers to create Web services, in record time.

The common method used to implement mainframe Web services is to build numerous small, individual services that require further assembly to get specific data. However, this send-and-reply mechanism produces high traffic on the network.

Ivory Service Architect solved this in a different and simpler way— composite services.

- The application server only sends one request to the host, which in turn executes the series of IMS transactions, then packages and returns the results.
- The Web services are defined using the Ivory® Studio development interface and no coding is necessary.
- The fast and easy implementation left LBBW more than satisfied with the quality and performance of Ivory Service Architect.

## RESULTS

### Strong ROI, Enhanced Interface and Improved Customer Service

For LBBW, introducing a solution using Web services, specifically for the mainframe environment, represents an investment in the future and a means of extending the ROI of mainframe assets.

- Up to 80% of the functions now introduced can be reused for other services both for the customers and for the customer advisors, which translated into a significant cost reduction.
- Staff motivation improved due to the Ivory project, particularly among the COBOL development team, which was previously considered somewhat old-fashioned. Now, thanks to Ivory Service Architect and SOA they are up to date and in demand.
- In addition, the solution was so easy to use that LBBW was able to forego the hiring of several FTE's originally allocated to the project.

***“Now we are on to the other functions of our legacy applications, those of the back office, will also be migrated to a service-oriented architecture.”***



**No** additional FTEs or mainframe skills required = saves money



**Faster** project implementation time over other options



**Easy** to learn, mastered Ivory in just 2 days

# 80%

**Strong ROI** - Can continue to reuse 80% of functionality

“The decision to use web services turned out to be the right approach. Using Ivory, the functionality for all bank entities is now easily available as individual services to all authorized users. Ivory Service Architect was by far the most flexible and adaptable solution for the bank's mainframe environment. In fact, our team mastered Ivory Service Architect within two days without any training just “learning by doing.” ”

-Hans -Jürgen Bäuerle,  
LBBW Development

For over 30 years, GT Software has helped enterprise organizations unify business information across platforms, data formats and programming languages — including the “hard to access” mainframe. More than 2,500 organizations across the globe trust GT Software to help them improve business intelligence, workforce productivity and customer experience.