



#### UniCredit Group

One of the largest banking and financial services organization in Europe with a network of 7,200 branches and strong local roots in 20 countries.

**Industry:** Financial Services  
**Geography:** Europe

#### Deployment Summary

- Grid computing creates a virtualized environment wherein the bank can match user demand with the supply of available system and data resources.
- The grid platform provides an on-demand environment that dramatically improves application performance resiliency and uptime.
- Grid computing allows the bank to use its risk analysis and pricing application to optimize processing of intraday and end-of-day financial results.

#### Benefits

- Grid computing guarantees the minimum processing time for even the most complex of trade pricing and modeling calculations.
- The bank's pricing department is now able to price more than two million deals in less than two hours; before deploying the grid solution, this process took more than a day.
- The grid computing platform significantly reduces the bank's operational risk and lessens redundancy in data generation.
- With a unique financial model that is valued at a group level, the bank avoids any inconsistencies in data provided by different groups within the bank



"TIBCO has built its business on a grid computing platform that allows customized applications to use Virtualization and automation to share IT resources in a heterogeneous environment...as organizations become more mature in managing IT services over time, a natural inclination is to optimize by consolidating and reducing costs."

**Gartner, Cool Vendors in IT Operations, 2006**

## Virtualization for the Real-Time Enterprise

### Background

UniCredit Group is one of the largest banking and financial services organizations in Europe with a network of 7,200 branches and strong local roots in 20 countries. Its international network comprises branches, representative offices and small banking subsidiaries in 40 countries worldwide.

### Motivation

With the passing of International Accounting Standard (IAS) 39 and Basel II regulations, European banks are now required to establish principles for recognizing and measuring corporate holdings. These holdings include financial assets, liabilities and contracts to buy or sell non-financial items. The regulations also require that banks provide uniformity with how they approach risk management across nations. With these strict compliance deadlines, UniCredit's Capital Allocation Unit — Group Pricing department (CAGP) needed a system that could uniquely generate financial figures and perform computations in the least amount of time possible. The central pricing application — named "Bulldozer" — had the goal not only to deliver timely and compliant financial figures, but to reduce the firm's exposure to operational risks.

### Challenges

To deal with such a complex international compliance issue, UniCredit was prepared

to face an ongoing, time-consuming project. The firm had to investigate best practices and cost-effective methods and evaluate vendors from the ground up.

### Solution

The bank's IT department, UniCredit Global Information Services (UGIS), turned to TIBCO, a global provider of application virtualization software, to achieve its compliance goals. TIBCO was UGIS' first choice because of its international recognition as a market leader in financial services virtualization technologies. TIBCO had also successfully helped other major international financial institutions with compliance challenges.

TIBCO GridServer® is application virtualization software that enables application services to be distributed and executed across a shared, heterogeneous infrastructure. By creating a virtualized environment that matches user demand with supply of available system and data resources, GridServer provides an "on-demand" environment that dramatically improves application performance resiliency and uptime.

UniCredit developed its "Bulldozer" pricing application with GridServer to optimize processing of its intraday and end-of-day financial results. Bulldozer is a custom-built Java application developed to compute a high volume of financial figures for risk analysis and IAS 39 compliance. The processed figures are then

managed by UniCredit's CAGP both to support internal operations and to publish them to other departments of UniCredit CFO and to the bank's legal division.

UniCredit developed its "Bulldozer" pricing application with GridServer to optimize processing of its intraday and end-of-day financial results. Bulldozer is a custom built Java application developed to compute a high volume of financial figures for risk analysis and IAS 39 compliance. The processed figures are then managed by UniCredit's CAGP both to support internal operations and to publish them to other departments of UniCredit CFO and to the bank's legal division.

### Results

Working with TIBCO guaranteed the minimum processing time for even the most complex of trade pricing and modeling calculations. GridServer has maximized computing efficiencies with UniCredit's CAGP, which is now able to price more than two million deals in less than two hours. Before TIBCO, this process took more than a day. These figures are then forwarded to the bank's accounting, finance and legal entity departments.

"The enhanced computing power GridServer provides our pricing software has exceeded targets beyond our expectations," said Alberto Ricciotti, head of Group Pricing for the Capital Allocation Unit at UniCredit. "Our original goal when we embarked on this project was to independently price 600,000 deals. We are now doing more than two million deals in the same timeframe."

As one of the first Italian banks to leverage virtualization technology, UniCredit

significantly reduced its operational risk and lessened redundancy in data generation. By having a unique financial model that is valued at a group level, UniCredit avoided any data inconsistencies provided by different groups within the bank.

"The performance gains realized by UniCredit are extremely compelling," said Alun Baker, managing director of EMEA operations at TIBCO. "UniCredit is effectively deploying TIBCO software to better align IT with changing business and compliance priorities."

Following its successful implementation, UniCredit is now involved in discussions about the best ways to address compliance issues in Germany and Austria. The bank's TIBCO use case is currently being evaluated as a best practice model for efficiency.

"The enhanced computing power GridServer provides our pricing software has exceeded targets beyond our expectations. Our original goal when we embarked on this project was to independently price 600,000 deals. We are now doing more than two million deals in the same timeframe."

**Alberto Ricciotti**  
**Head of Group Pricing,**  
**Capital Allocation UniCredit**



**TIBCO Software Inc.** (NASDAQ: TIBX) technology digitized Wall Street in the '80s with its event-driven "Information Bus" software, which helped make real-time business a strategic differentiator in the '90s. Today, TIBCO's infrastructure software gives customers the ability to constantly innovate by connecting applications and data in a service-oriented architecture, streamlining activities through business process management, and giving people the information and intelligence tools they need to make faster and smarter decisions, what we call The Power of Now®. TIBCO serves more than 4,000 customers around the world with offices in more than 20 countries and an ecosystem of over 200 partners. Learn more at [www.tibco.com](http://www.tibco.com).

[www.tibco.com](http://www.tibco.com)

Global Headquarters  
 3303 Hillview Avenue  
 Palo Alto, CA 94304

**Tel:** +1 650-846-1000  
 +1 800-420-8450  
**Fax:** +1 650-846-1005