# **ЖИТИТА**



# Atruvia AG: Streamlined & Future-Proofed Testing Processes with Time Machine®

Time Machine Cuts Six Months of Testing into Just 3-4 Days - Ensuring On-Time Delivery.

#### Quote

"Time Machine has been a game-changer for us. It provided the precise time-control capabilities needed to optimize our testing processes and ensure future-proofing of our systems. The Solution-Soft team's proactive support made all the difference in delivering a smooth and successful implementation."

### Andreas Wöhrle Technical Project Manager

"We successfully implemented Time Machine solution for our critical testing, ensuring smooth operations. The team received exceptional feedback from top management, particularly for executing the year-end processing under pressure. Despite many extreme obstacles, choose Time Machine and work closely with Solution-Soft team, we are able to complete the testing successfully, and the results were overwhelmingly positive"

Wolfgang Kraus
Overall Project Manager

#### **About Atruvia AG**

Atruvia AG is the digitalization partner of the cooperative FinanzGruppe. The company combines decades of expertise in banking and information technology. Its IT solutions and services, which are specially tailored to banks, range from data center operations and the Atruvia banking process to app development. The company uses cutting-edge technologies such as smart data and places a strong focus on process optimization and regulatory compliance.

The company, with administrative headquarters in Karlsruhe and Münster and branches in Munich, Frankfurt and Berlin, currently employs more than 9,500 people in the group, who together generate annual group sales of around 2 billion euros. Atruvia's customers include around 700 Volksbanken and Raiffeisenbanken in Germany, the companies of the cooperative financial network, as well as numerous private banks and companies in other sectors, including the ADAC. Atruvia supports around 153,000 bank workstations and manages almost 89 million customer accounts. With a good 25,600 self-service devices nationwide, the company ensures a seamless cash supply across the board. This highly networked and complex IT environment required advanced solutions for effective time-critical testing and operational synchronization.

## **Atruvia's Challenge**

Atruvia runs the world largest Openshift cluster with 16,000 cpu cores and 1,300 namespaces, furthermore, a sophisticated Service Mesh is running on top of it. To time travel a collection of namespaces together alone with mainframe legacy applications without impacting other namespaces is extremely challenging!

The desire to automate Regression and Integration test with Continuous Integration/Continuous Distribution (CI/CD) Software Life Cycle further complicates matters.

As a result, the Atruvia team faced significant challenges when performing date and time sensitive logic testing in their OpenShift environment. The ability to perform regression testing involving time travel in this heterogeneous environment consisting of OpenShift cluster, mainframes, web servers and databases is crucial. The obstacles prevent them from performing such time travel testing in the course of quality assurance for important financial statements and reports.

#### **The Time Machine Solution**

Solution-Soft's Time Machine solves Atruvia's challenges by enabling precise time travel across databases and OpenShift clusters. This enables the seamless simulation of specific dates and times using persistent virtual clocks that automate date changes without the need for manual resets, ensuring accurate synchronization.

#### **About Solution-Soft**

Since 1997, Solution-Soft has been at the forefront of virtual clock software and time travel testing solutions, empowering organizations in the everevolving digital world. Our flagship product, Time Machine®, has revolutionized application testing, enabling thousands of companies, including many of the Fortune 100 US companies, to reduce costs and accelerate project delivery by an average of 3 – 10 times across traditional systems and containerized applications.

The Time Machine Product Suite extends these capabilities, optimizing cloud migration, test automation, Agile/DevOps, and containerization testing. Our latest innovation, Time Machine for Containers, supports standalone Docker containers and large-scale Kubernetes and OpenShift clusters (including a 16,000+ CPU core cluster, 1,300+ namespace deployments reducing time travel testing cycle by 60 times!)

Trusted by over thousands of customers worldwide across diverse industries (including AIG, ATO, Atruvia, AMEX, BBC, Boeing, Discover, Lloyds Bank, SNCF, State of CA, ID, HI, MO, OH, NC, and more) and partnered with industry leaders like Accenture, Deloitte, DXC, IBM, Microsoft, Oracle, and Red Hat.

Solution-Soft was founded in 1993 and is headquartered in Santa Clara, CA, providing cutting-edge solutions for your time travel testing needs.

#### Contact

General: +1.408.346.1400 US Sales: +1.408.346.1415 EMEA: +44 20 3097 1704 APAC: +61 26 100 3030 India: +91 7009330564 For a Demo, visit our website at www.solution-soft.com. With the Time Machine agents installed on all relevant systems, it enables synchronized time travel across 1,300 namespaces without disrupting other parts of the cluster.

The deployment has been significantly streamlined with the Time Machine OpenShift Operator, enabling easy installation and automatic configuration of target workloads. Through a simple label assignment, deployments could quickly be prepared for time travel.

In addition, the Time Machine Floating License Server enables the OpenShift environment to scale dynamically by automating the licensing process for each newly created Time Machine pod. The API feature provided by Time Machine Sync Server supports a complete automation of the time travel control (date and time) and can be seamlessly integrated into the existing automation. The solution's flexibility in adapting to different time zones and speeds further improves testing capabilities.

After Time Machine has been integrated into Atruvia's DevSecOps operations, it automates time travel for regression testing of date- and time-sensitive banking logic, which is extremely valuable and important for their critical year-end accounting simulations on an annual basis.. It also enables smooth software updates during time travel sequences, ensures business continuity, and reduces manual effort.

"Time Machine has changed everything for us. It provides the precise time control features we need to optimize our testing processes and future-proof our systems. The proactive support of the Solution-Soft team made all the difference in ensuring a smooth and successful implementation" Andreas Wohrle the Technical Project Manager excitedly pointed out.

By using Time Machine, Atruvia was able to significantly improve the testing processes that would otherwise have posed a major challenge when performing extensive critical test scenarios in their complex container OpenShift environment. In addition, operational efficiency and system reliability were increased. Time Machine helps the team to achieve its project goals and deliver on time.

Wolfgang Kraus, overall project manager, says: "We successfully implemented the Time Machine solution for our critical tests and thus ensured smooth operation of the year-end simulation tests. The team received excellent feedback from management, especially for the execution of the year-end processing. Despite many major obstacles in implementing Time Machine, we were able to successfully complete the integration of Time Machine and the subsequent tests with very good results thanks to the close and cooperative partnership with the Solution Soft team."