



REFERENCE

## Load testing and production monitoring for baywa.de/shop Configuration improvements for tecparts.com

**BayWa AG, an international trading, logistics and service group, offers ever more of their high-quality product and service range for agriculture, building and energy to the end user using their own online shops based on the Hybris platform.**

As part of the planned Go Live of the new BayWa online shops in March 2013, RI-Solution GmbH, the internal IT service provider of the BayWa group, commissioned our Hybris and e-commerce specialists to perform load tests, set up monitoring for the production environment and to also perform a follow-up one month performance analysis.

During the successful cooperation, mgm was asked to implement a further project for BayWa: A performance analysis and configuration improvements for the TECparts shop, a specialized online shop for agricultural spare parts and technology products.

### BayWa online shop: Load testing and production monitoring by mgm ensures successful Go Live and stable performance

According to our customer's wishes to test the extended baywa.de/shop on the Hybris platform for load stability before going live, a team of mgm Hybris and load testing experts, specialists of the customer's own IT as well as one member of Microsoft Professional Services performed two types of load tests: tests using scenarios close to real usage to test the standard behavior of the shop as well as tests with deliberately caused overload situations to detect possible bottlenecks.

The systematic analysis of the results allowed the optimization of the garbage collection and Hybris cache settings to meet the requirements of an online shop perfectly. The goals concerning the number of parallel order processes and the desired response times could so be achieved.



*"mgm technology partners specializes in the use of the Hybris platform even for high load scenarios. We benefitted from this expertise for the optimization of our shops."*

**Sascha Jürgens**

Head of eBusiness Development  
RI-Solution GmbH

BayWa is a world-wide active group with the core competencies trade, logistics as well as additional services in the sectors agriculture, energy and building. The main company, founded in 1923, is headquartered in Munich. Focus of the international activities outside of Europe is mainly the USA and New Zealand.

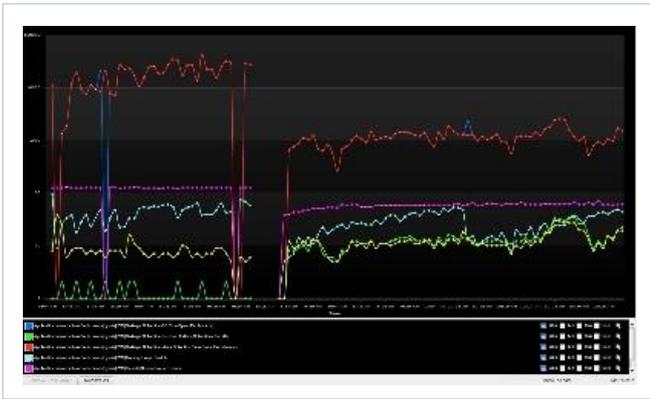
The company, with more than 17.000 employees, offers high-quality products and services as well as individual consulting and sustainable solutions in the areas agriculture, agricultural technology, fruit, building materials and energy in localized stores and offices and via specialized online shops (baywa.de/shop and tecparts.com).

mgm also delivered an extensive test documentation created parallel to test execution, offering important criteria to help solve any problems occurring later on. This allows BayWa to save time and effort in maintenance in the future. The documentation was extended with the results of the one month production monitoring. All of this together created a best-case scenario benchmark for fast problem solving.

## tecparts.com: Performance tuning through optimized garbage collection and memory configurations

Herr Sascha Jürgens, Head of eBusiness Development of the RI-Solution GmbH, tasked mgm with the in-depth performance optimization of the TECparts shop to prevent possible stability problems.

mgm's specialists used AppDynamics for monitoring, as its flexibility and clear layout make it a particularly useful tool for the performance optimization of stores that are already operative. The detailed analysis of the monitoring data as well as the FredHopper log files showed that the existing configuration of the Java Virtual Machine with respect to garbage collection and the resulting memory settings were not optimal.



**Figure1** : Changes in the behavior due to the new garbage collection settings (two-hour interval)

“We proposed a course of iterative adjustments to the configuration based on the detected garbage collection behavior. The follow-up monitoring shows”, says Martin Varendorff, Chief Architect at mgm, “that tecparts.com is stable and that the response times are quicker since the proposals were implemented.”

As part of the presentation of the results, RI-Solution and mgm were able to work out further improvements.

Could we catch your interest in our know-how?

Enter into dialogue with us then:

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