Mercedes-Benz saves 25 man-days annually on QA refreshes

“Without Gold Client, we would have had to build two test environments, invest in a full-size copy of the production system and more than double our storage requirements, which would have been very costly.”

Challenge
Mercedes-Benz USA implemented SAP Finance and Controlling in 2000, followed by Parts Logistics, Materials Management, Sales and Distribution, and Production Planning in recent years. With five business units running on two instances of SAP, the environment has become progressively more complex. The total SAP system now houses two terabytes of data, with pricing tables alone adding up to 400 million records.

With as many as 20 independent DEV or new implementations on-going at any point in time, all with specific needs for fresh data, quality assurance (QA) refreshes were performed monthly. The refresh was important because without updated data, developers would be forced to test in QA instead of DEV, slowing down projects. Yet refreshing the entire QA dataset for one project—the only option—would disrupt other projects that had already created its test data and needed the QA environment to remain stable.

“It was getting cumbersome to do a full refresh quarterly,” said Tom Lavin, BASIS Administrator at MBUSA. “We had to schedule regular system refreshes since different developers needed different pieces of data for testing. We had to perform a full refresh to get everyone what they needed.”

The primary issue caused by the refreshes was that they took the non-production systems offline for several workdays in the middle of the week, which would negatively affect ongoing projects. Mercedes-Benz wanted to be able to provide developers with the data they needed for testing on an as-needed basis while reducing the number of full refreshes required per year. The company also wanted to be able to protect version information.

Solution
After thoroughly investigating its options, Mercedes-Benz determined Attunity Gold Client Solutions would best fit their needs, allowing data selection on virtually any parameters developers needed between full refreshes. It would also allow the company to keep costs down by utilizing existing infrastructure rather than purchasing new servers.

Another determining factor was the software's ability to maintain number sequences for entries such as sales data.

“If there is a problem in production, normally it can be difficult to recreate it in the QA environment,” added Lavin. “With Gold Client, we can copy the exact data of the situation in to QA, right down to maintaining proper number sequences, and debug it there to discover the source of the problem. When we have a fix we can promote it to production with more confidence that we've resolved the problem.”

About the Customer
Mercedes-Benz USA (MBUSA), headquartered in Montvale, New Jersey, is responsible for the distribution, marketing and customer service for all Mercedes-Benz and Maybach products in the United States. MBUSA offers drivers the most diverse line-up in the luxury segment with 12 model lines ranging from the sporty C-Class to the flagship S-Class sedans and the SLS AMG supercar. MBUSA is also responsible for the distribution, marketing and customer service of Mercedes-Benz Sprinter Vans in the US. More information on MBUSA and its products can be found at [www.mbusa.com](http://www.mbusa.com) and [www.mbsprinterusa.com](http://www.mbsprinterusa.com).
Implementation took roughly one week, including training BASIS team members on using the tool in day-to-day scenarios. The Client Construct part of Attunity Gold Client Solutions allows the company to refresh full master data in QA, while Data Echo provides the ability to select more targeted data for specific purposes.

When Mercedes-Benz upgraded its Service Parts Logistics system, Gold Client's data refresh capabilities saved significant manpower. The team was able to build unit testing clients on the DEV system rather than having to create a new, full QA system. Mercedes-Benz then used Gold Client's intelligent data transfer capabilities to pull in a month's worth of transactional data from production. As a result, they were able to perform upgrades and required development while bypassing the need to build a full-size QA system until they were ready to test.

“That was a big success story for us,” Lavin said. “Without Gold Client, we would have had to build two test environments, invest in a full-size copy of the production system and more than double our storage requirements, which would have been very costly.”

Mercedes-Benz has found other uses for Attunity Gold Client Solutions as well, such as assisting in efforts to reduce the number of transports between DEV and QA. With Gold Client, they are able to keep data current in DEV which allows for affective unit testing within DEV. This reduced the need to transport all changes to QA just for unit testing and decreases the number of transports overall.

The tool saves time for developers and functional users by letting them preserve custom testing data out of QA prior to a refresh. Those groups are now able to store custom tables before refreshes, and then restore them afterward. Before, the BASIS team had to rebuild those custom tables manually. “Word has gotten out that we can save data for them,” Lavin said. “It’s saving a lot of people a lot of time.”

Gold Client further reduces the workload on the BASIS team with a feature called Data Snap. Functional users can define their own selection criteria, perform the data extract from the Production system and load QA or DEV—all on their own.

Results

Attunity Gold Client Solutions has helped Mercedes-Benz in several areas. Through its ability to pull master data, such as pricing, separately from the individual transactional data, Gold Client has significantly cut the time to deliver the data required by some groups. In fact, these groups can pull master data in less than an hour using Gold Client's Data Snap feature.

Faster problem resolution is realized as the developers can now copy the erroneous transactional data from the production system to the DEV or QA environment. The application fix can now be tested on exactly the same data that caused the error in Production. If needed, this transactional data can also be quickly reloaded in DEV or QA as the fix is further refined and tested.

Gold Client has improved the efficiency and overall time of QA refreshes. “We've been able to reduce our time from three days to two days on refreshes, and the number of resources working on QA refreshes from four down to two,” Lavin said. “We save six to seven man-days worth of time on each refresh—four times a year—which adds up to 25 days a year,” Lavin added.

“Having the ability to get a more stable QA environment was very valuable to us,” Lavin added. “We would definitely recommend Gold Client to anyone struggling with similar challenges.”