

SERVICE RESPONSE ACCELERATION

Summary

ProLogis is the world's largest owner, manager and developer of distribution facilities, with more than 422 million square feet (39.2 million square meters) of industrial space in 80 markets across North America, Asia and Europe.

ProLogis leases industrial space to manufacturers, retailers, transportation companies, thirdparty logistics providers and other enterprises with large-scale distribution needs. Headquartered in Denver, Colorado, ProLogis is a Fortune 1000 company and a member of the S&P 500.

By bringing a dramatic new vision to industrial real estate, ProLogis has built the first and largest global network of distribution facilities that enable companies to streamline critical supply chain operations. From the headquarters in Denver, the ProLogis IT organization operates the systems required to meet the needs of their customers, the facilities managers worldwide who utilize ProLogis logistics and distribution sites around the world.

Responding to the needs of these customers and improving service levels is of the highest priority for ProLogis. A key application runs the semi-annual reconciliation of charges by customers at warehouse facilities. Further, off-the-shelf software for real estate management is used, taking advantage of heavy customization by ProLogis. The majority of the systems run on Oracle databases, but Microsoft SQL Server is being utilized for enterprise data warehouse. And with expansion moving quickly globally, the operation is becoming more complex.

IT Challenge

The IT group at ProLogis needed a way to improve service response for property managers in North America. Based on a customized solution, for Common Area Maintenance (CAM), the process required online participation from the internal customers to review and approve charges for their facilities. Time for customers to complete this operation was becoming a problem in some cases. In past years, IT had seen an increase in the time required for customers to execute CAM related queries, with certain operations running for excessively long periods. The DBAs had utilized standard tools and scripts in attempting to find the sources of the problems, but had not made a significant dent in the performance issues. ProLogis felt that it needed a new approach to identifying and resolving performance in order to maintain the high level of committed service.

Database Performance Analyzer Solution

DPA was deployed on the databases supporting the CAM application with remarkable results.

"From the first install, it was like a breath of fresh air, giving us visibility as to what was really happening", according to the VP of Application Development.



For ProLogis DPA recommendations led directly to 25% improvement in overall performance for the application, exceeding goals.

Since DPA is a continuously monitoring program, ProLogis had the ability to browse through the charts and to choose period noticeable performance problems to focus on. The team focused on specific time periods when they had problems, starting with four hour slices. In each slice, the team identified the problem SQL queries and identified the root cause of their delays. By ranking and quantifying the SQLs based on associated delays, the ProLogis team was able to instantly focus on the SQL causing the most problems, and not spend time tinkering with SQLs that did not impact the customers directly.

The insight and recommendations from DPA allowed the ProLogis team to rewrite some queries or add indices. And they used DPA on test systems to validate the impact of their changes. As a result, they achieved a 25% improvement in overall performance for their critical application. "It is just like a congested highway, and what we got was improved flow of transactions and better throughput for all of the SQLs", stated the VP.

"For our customers, time is money, and we realized a 25% performance improvement directly attributable to SolarWinds", said the Senior Programmer associated with the project.

In one example, a query that hits 21 million database rows was executing 1.4 million times every 24 hours and generating significant wait time. This was part of an off the shelf software package, so the team could not rewrite the query but was able to reconfigure the database partitioning to more efficiently accommodate this heavy load.

Beyond the direct performance gains on the CAM system, ProLogis found other benefits with DPA:

- **Improved Vendor Communications.** ProLogis uses a packaged property management application that is heavily customized for their situation. When this app has problems, there is always a difficulty explaining the results for the vendor and identifying who is responsible. DPA gave the ProLogis team an objective basis for identifying issues with the vendor, and for documenting when the problem was not the result of their customization. Even though the packaged application could not be changed, DPA solved problems by facilitating communications between the groups. "DPA allows us to deal with facts, not down at the guessing level, when working with the software vendor", according to the ProLogis programmer.
- **Testing.** DPA was used to improve the test and validation process after changes were made to the applications and database configuration. This gave the team the ability to confirm impacts of the changes and assure themselves that there were no unintended consequences.
- **Improve Team Skills.** "Our core competency is real estate, not software development, so DPA gives us insight we did not have before", stated the VP of Applications Development. ProLogis used DPA to improve their skill level and increase expertise across their team. Rather than cover up the details and prevent a real understanding of the system, DPA allowed the ProLogis team to better understand the exact operations of their applications, raising the knowledge level across the board.

“ For our customers, time is money, and we realized a 25% performance improvement directly attributable to SolarWinds **”**.

— Senior Programmer,
ProLogis

“ These are our customers. We serve them and make their lives better by using DPA. **”**

— Senior Programmer,
ProLogis

- **Single System, Multiple Platforms.** While Oracle was the database for the critical CAM application, a new data warehousing project is among several bringing SQL Server into the ProLogis environment. DPA gave ProLogis a performance monitoring architecture that covered both system from a single repository server and single client.

“SolarWinds gave us the unique ability to simplify the problem. Getting the same information was difficult with other tools and DPA simplified the process; it did the work for us. This got our team to results quicker, and directly created cost and time savings for our customers.”

- VP of Application Development

Conclusion

The overall results achieved during the first six months were outstanding, and created increased enthusiasm with the ProLogis team. It allowed the company to improve their customer service, cut costs, and be more responsive to the changing business.

“ With the extreme growth ProLogis has seen over the past year, capacity management and rapid performance tuning are critical. SolarWinds help us keep ahead of the growth **”**

— ProLogis CIO

ABOUT SOLARWINDS

SolarWinds (NYSE: SWI) provides powerful and affordable IT management software to customers worldwide from Fortune 500 enterprises to small businesses. In all of our market areas, our approach is consistent. We focus exclusively on IT Pros and strive to eliminate the complexity that they have been forced to accept from traditional enterprise software vendors. SolarWinds delivers on this commitment with unexpected simplicity through products that are easy to find, buy, use and maintain while providing the power to address any IT management problem on any scale. Our solutions are rooted in our deep connection to our user base, which interacts in our online community, thwack, to solve problems, share technology and best practices, and directly participate in our product development process. Learn more today at www.solarwinds.com.

7171 Southwest Parkway, Building 400 | Austin, Texas 78735 | P: 866.530.8100 | F: 512.682.9301

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