



psl

**PSL's Performance Tool
Drives Innovation and
Reduces Data Processing
Time from Days
to Minutes**

www.pslcorp.com

Performance Tool Features

- Can process data from any performance robot, including JMeter and Gatling
- Processes SAR and Perfmon logs
- Customizable graphics to fit specific requirements
- Reduces data processing times
- Easy-to-understand performance graphics and visuals
- Will integrate machine learning and data analytics to improve predictions

Executive Summary

PSL, a purpose-driven software development outsourcing firm, is one of the leading companies tackling the challenge of performance testing and analysis. To help guide and streamline the performance engineering process, PSL's team of performance engineers created Performance Explorer, PSL's proprietary performance testing management tool. The tool aids engineers in collecting and analyzing performance data, helps to inform predictions for future application behavior, detects risks such as memory leaks, and optimizes data processing efficiency.



Tech Stack

Express  React  Jest  mongoDB  elastic 

Background

PSL, a nearshore software development organization, operates at the intersection of drive, quality and innovation. The company's reliable nearshore model, coupled with its top-tier, extensively trained software engineers, allows for efficient agile iterations and continuous experimentation. Performance Engineering is one of its core capabilities and transversal disciplines. A dedicated team of highly skilled professionals work across the organization to develop better and more sophisticated strategies to keep applications stable and running at peak levels of performance for a variety of different clients.

Challenge

The catalogue for performance engineering tools remains somewhat limited. Often, the tools that are available aren't easily customizable, only work with specific technologies and are quite expensive to use. This leaves performance specialists scrambling to assemble a collection of tools to gather the data they need to understand system capacity, run load tests, and find ways to optimize performance.

PSL set out to design, build, and scale a tool that would allow its performance team to monitor tests, receive data specially tailored to each project, and, in the future, apply machine learning algorithms to improve predictions and expand capabilities.

Solution

After many failed attempts trying to find the right performance testing management tool—one that was cost-effective, provided useful insights, and processed data quickly—PSL created Performance Explorer. This proprietary platform helps process data, identify trends, and analyze performance test results. Its main virtue is taking data from performance robots, JMeter, Gatling or other data sources, automatically storing it in databases like MongoDB and Elasticsearch and processing the data to produce easy-to-understand graphics for performance analysis. Through an integration with Kibana, Performance Explorer creates customized graphics so engineers can visualize performance and scalability models. This allows performance teams to more easily analyze the data resulting from dozens of automated performance tests in projects across

the company. But, even the process of analyzing these results is quickly becoming a strenuous task.

To help address the issue, PSL intends to take the tool even further by adding advanced data analytics and machine learning algorithms to the performance platform. The project is looking to use the metrics generated by performance robots and map them out in Python in order to generate algorithms that would help the team detect outliers, trends, and predict future behavior with more ease and accuracy.

Through the continual development of the tool, PSL proves its ability to go beyond what's expected in the industry by clearly showing the levels of drive and ingenuity displayed by its workers to stand out in highly complex and competitive technical fields worldwide.