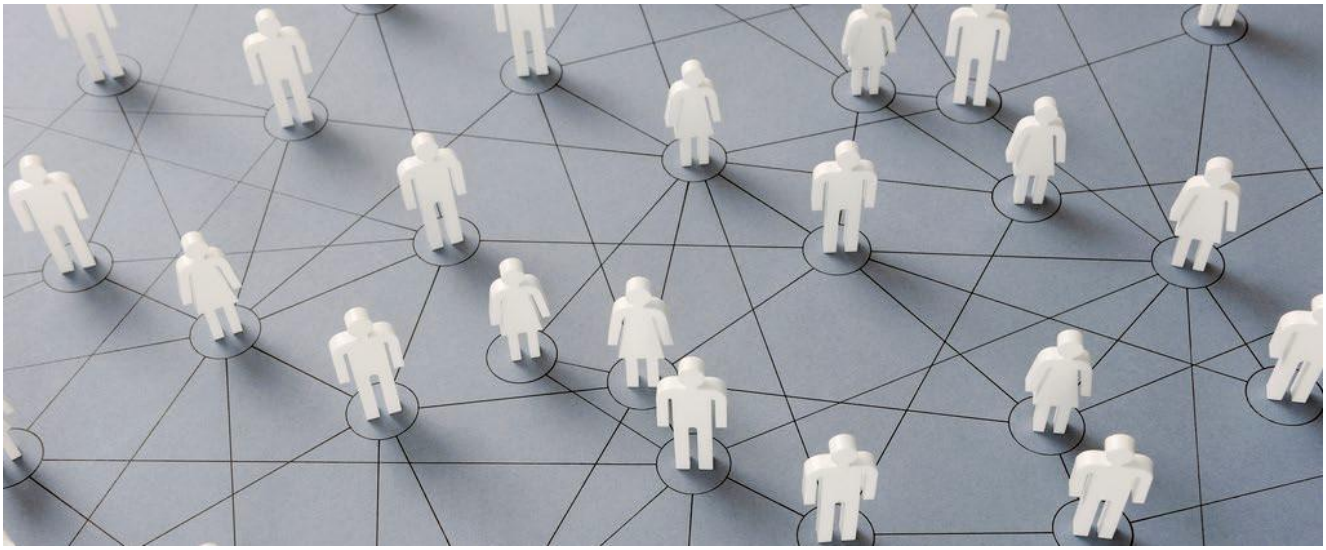

Performance Engineering Service

Overview

Today's hyper-connected world of applications is inherently based on a complex architecture with multiple system components and external API's in hybrid deployment models across private and public clouds. In this complex environment, ensuring great application performance is imperative for success of the business as it has direct correlation with user satisfaction and system uptime.

However, as the scale of users keep growing, organizations are facing challenges in isolating root cause of performance issues and fine tuning their systems for optimal performance. Further, today's users are likely to access applications from their choice of devices and networks, adding to the variables impacting performance. Deterioration in performance under load has often led to negative publicity, poor app store ratings and eventual crashes leading to downtime and revenue loss.

BPM Vision Technologies offers its' Performance Engineering Services to address these issues. We can leverage commercial and open-source tools to provide this service.

Benefits

By combining end to end testing, monitoring and root cause analysis, organizations can achieve the following benefits:

- Achieve faster time to value by leveraging experts

- Standardize processes and reporting
- Eliminate risk of downtime in production
- Reduced cost of performance testing
- Ensure superior user experience and customer retention
- Drive business growth and productivity

Performance testing types:

We conduct various Performance testing types, depending on the objectives:

Load Testing: Checks the application's ability to perform under anticipated user loads. The objective is to identify performance bottlenecks before application go live.

Stress Testing: Tests an application under extreme workloads to see how it handles lots of data processing. The objective is to identify the breaking point of an enterprise application.

Scalability Testing: Tests a systems ability to manage more: loads, users, requests, computations, you name it. This approach helps to plan capacity additions to your software system.

Endurance Testing: Tests a systems ability to endure loads over an extended period of time. This helps determine if there are any memory leaks

Volume Testing: Tests a systems ability to handle large amounts of data. Goal is to check software application’s performance under dynamically fluctuating database volumes.

Stability Testing: Tracks the software's reaction to sudden large spikes in the load generated by users; it helps evaluate the risk of downtime and schedule maintenance tasks.Key Modules and Capabilities of SDP are as follows:

Performance Engineering Service Overview

We believe that a thorough simulation of system load is imperative for assessing application performance to overcome the challenges. Any dependencies and variables that could impact performance in the real world must be adequately mimicked in the test environment. Additionally, it is important to monitor the system infrastructure and application layer and code performance to accurately pinpoint root cause of poor performance.

Our services are delivered through consultants specializing in performance testing and engineering while leveraging leading tools in the market. These services are delivered in flexible engagement models like turnkey or T&M.

The service can be delivered in a hybrid model with onsite and offsite resources.

We also provide consulting services to help you optimize system performance by guiding your engineering teams to fix issues related to scalability.

Performance Engineering Approach

We follow a structured methodology for quick time to value, given short timeframes available for performance engineering activities in the SDLC.

A. Project Planning and Requirement Gathering

We begin by understanding the testing objectives and test scenarios to be simulated in the test. This involves close collaboration with application owners, architects, users, analysts and even testers.

B. Test Preparation

This phase involves the following key activities.

- **Tools setup:** Installation and configuration of testing tools like LoadRunner

- **Test Environment and test Data Preparation**: Work with customer's IT teams during the setup of test environment to ensure it mimics production environment as closely as possible. Also, we work with DBAs and architects to setup required volume of test data in the test environment as well as a backup and restore mechanism for test iterations.
- **Test Script development**: Develop test scripts to simulate identified business processes, and populate the scripts with test data to support large volume of transactions
- **Test Scenario Design**: Setup the test scenarios based on the objective identified for testing. Additionally, setup conditions to emulate real world conditions through tools like Network Virtualization and Service Virtualization
- **Setup Monitoring tools**: Configure additional tools like APM tools and integrate with the test

C. Test Execution, Analysis and Reporting

Once the setup is ready, testing is executed and results are analyzed. This is an iterative activity based on isolation and remediation of successive bottlenecks identified.

Reports are shared with stakeholders in desired formats.

Why Partner With Us?

Feature	Benefit
Speed to Value	Decades of experience in performance engineering ensures quick results
AI advantage	We leverage leading AI based tools to deliver solid insights
Tailored Fit	We thoroughly understand your systems to provide a tailored solution

About BPM Vision Technologies

BPM Vision Technologies is a leading provider of innovative solutions that empower businesses to harness the full potential of technology. With deep expertise in Software Delivery Platform, agile transformation, consulting, and training, we partner with organizations to drive meaningful, measurable results.

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