Performance Testing Services (PTS)

An Overview

Performance Testing is a process by which a product/software is tested to determine its current performance. The objective is to establish the system's ability to function to specification and demonstrate acceptable response times while processing the intended transaction volumes on a production-sized database.

Performance Testing proactively determines the speed, capacity & degradation of existing systems with various loads / configurations under controlled & uncontrolled environments. It minimizes the risks of production downtime and poor performance of new applications or upgrades by verifying their ability to meet service levels and uptime requirements. Performance Testing determines stability and scalability of the application and above all gives the business & user confidence based on reliability.

Wipro’s Performance Testing Practice

Wipro’s Performance Testing Practice has rich experience in performance engineering tools from leading international and open source tools like Open STa, JMeter, etc. The consulting team is proficient with the approaches, methodologies and frameworks to provide an end-to-end performance solution for the complete application.

Our Approach to Performance Testing

- Well defined performance test lifecycle
- In-house load testing methodology & best practices
- Unique performance testing framework and methodologies
- End-to-end consulting from defining a performance testing approach, identification of appropriate tools and methodologies, setting up test infrastructure, test analysis, reporting and maintenance of performance test assets
- Process oriented deliverables to the end customer
- Detailed test analysis reports identifying performance bottlenecks and recommendations

Services Offered

- Load testing
- Reliability testing
- Volume testing
- Negative testing
- DB clustering and redundancy testing
- Performance testing
- Stress testing
- Scalability testing
- Failure testing
- Serviceability testing
- Network configuration and sizing testing

Wipro’s Performance Testing Framework

- Captures the application environment
- Checks the environment details
- Hardware configuration
- Parameters verification
- Provides option to upload the performance testing scripts
- Resets the application
- Enables scheduling multiple runs using the Load Testing Tool
- Monitors resources and collects details of resource usage on various layers
- Once the run is over, sends an automated mail with basic KPIs like CPU, memory and other statistics
- Can send mail to a group of engineers who might be stakeholders
- Saves results and log files into a database which can be used for detailed analysis later
Case Study

Large Financial Services Company in the US with a global customer base of $49.2mn and managed loans totaling $84.8bn. The client is a leading provider of credit cards, auto, home & personal loans, healthcare products & insurance.

Challenges
- High post production performance issues
- Low productivity for performance test life cycle activities
- Inconsistent processes for performance testing across different application teams
- Non-availability of performance baselines and performance SLAs for applications under test
- Non availability of load modeling technique
- No standard methodology/technique to map load test environment with production environment

Wipro’s Solution
- Wipro has established a centralized managed services model for performance testing
- The activities are to be undertaken based on mutually agreed service level agreement for each work packet / performance test requirement

Benefits
- Zero post-production application performance issues
- Application team was empowered by performance test results to undertake capacity planning and to make intelligent decisions on hardware / software requirements
- Centralized performance testing services with a flexible pool of resources to meet fluctuating demands

According to a recent survey conducted by the Boston Consulting Group, 28% of the users do not return to a company’s web-site if it does not perform sufficiently well, and a further 6% do not even go to the affiliated retail store anymore.

In its often-cited study Zona Research, estimates that transactions with a total value of $4 billions was abandoned in the year 2000 because the response times of websites were too slow.

According to the Gartner Consulting Group, through 2005, more than 80% of application performance and availability failures will be blamed on network problems, but the network will represent less than 20% of the root cause.

Wipro Limited is a USD 3.45 Bn IT Services company with over 590 clients globally. We have more than 68,000 employees, 45 Sales Offices and 46 Global Development Centers. We ensure stringent quality measures including using Six Sigma, PCMM, CMM Level 5, CMMi and Lean methodologies.

With 6000+ dedicated testers, the Testing Services Division is amongst the largest third party offshore testing services providers in the world.

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