



# Performance Services

AppLabs' Performance Services are designed to support the delivery of all types of IT software and hardware change, ensuring they fully meet the performance requirements for all key stakeholders.

Performance issues are traditionally difficult to identify prior to live operation of a new system but, when detected after launch, often involve costly remedial work. By using advanced testing services and tools, AppLabs can undertake realistic proving of your new systems in the development stages and provide important feedback to ensure problems are rectified at an earlier stage.

Once a new system is in live operation, performance continues to become a critical factor. We provide a bespoke

solution using our remote web load testing infrastructure, enabling you to select your performance test and quickly verify changes prior to implementation.

We also recognize that identifying problems only provides part of the solution. AppLabs' in-depth experience in technology development and testing ensures we can always identify the source of the problem and recommend a remedial course of action.

No matter what stage you are at in the lifecycle of your IT systems, AppLabs can provide performance services that optimize your systems' performance.



# Performance Services Summary

AppLabs' Performance Services will assist in the delivery of software products and systems that fully meet the performance requirements for all key stakeholders.

All software has performance characteristics, whether intended or not. The process of software development predates the emergence of performance characteristics but, if left unplanned, there is no guarantee that the final performance will be acceptable.

It is commonly assumed that performance can be addressed after the software functionality has been developed and tested. While this approach sometimes produces adequate results, it is inefficient and carries a high risk of failure.

Our full software lifecycle Performance Services are designed to meet your needs at any, and every, stage of the software development lifecycle:

## Idea

AppLabs' performance consultancy services can help you understand the meaning of 'acceptable performance' thresholds in the context of your business.

The performance characteristics of the software may be a key business differentiator. However, do you know what these thresholds are? Can you derive metrics to determine that the software meets your thresholds? Can you cost-effectively measure your chosen performance metrics? If you rely on third parties to implement the complete solution, what performance quality gates can you deploy to retain some degree of control?

Even at the earliest stages, AppLabs can help you formulate strategies to meet the challenge of delivering high performance software systems.

## Requirements Definition

We have an unparalleled insight into the critical decisions that lead to good or bad performance. Although the user experience is the touchstone of the complete system performance, it is the culmination of many component interactions, any one of which can render the complete

system unusable. We can facilitate the delivery of conforming performance requirements either at the requirements' elicitation or by using static testing techniques at the requirements definition phase.

## Specification and Design

During specification and design of a system a number of critical decisions are made that affect both the potential performance of the complete system and its ability to be effectively performance tested. At this stage, a performance test strategy and plan are essential to ensure that the performance requirements and objectives are fully met.

## Development

Like any other type of defect, a performance defect is most cost-effectively dealt with early. Unit, component, integration and system test levels all present opportunities to evaluate performance. Many different types of performance tests could be deployed, depending on the degree of risk mitigation required.

AppLabs can implement flexible performance testing through our managed, on-site engagement model or from our outsourcing and offshore performance Centers of Excellence.

## Implementation

No development environment fully emulates the additional requirements and constraints placed on an operational system. Operational policies may add complexity that was not present during development. You may have the capability, or the need, to fully replicate a software system's operational environment and this can provide a testbed where the implementation may be performance tested fully before being deployed.

Alternatively, AppLabs can provide remote load testing capabilities over the internet onto your own infrastructure or we can recreate your full operational environment in specialist and advanced performance test labs for the ultimate in performance quality assurance.