



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.



Remote Web Load Testing

AppLabs' Remote Web Load Testing Service offers web application performance testing and analysis, providing a solution to your outsourced web performance testing needs. The service validates web applications that use HTTP and/or HTTPS communication performing GETs and/or POSTs (and other elements such as AJAX or other limited Heavy Browser activities) between a browser and a web server/application using a virtual user testing model.

The AppLabs virtual user model considers the technical challenges of real-world testing. It also factors into the equation a cost-benefit analysis of the value of each business process that could be tested. By focusing on critical business processes, our service maximizes the value of the load testing by virtualizing those users that contribute most to the value of your business.

Virtual users are intelligent software agents that accurately replicate the action of a real user, simulating real user behavior such as variable think times and the inputting of a wide range of different data values across the entire range of the virtual users and between different interactions from the same virtual user.

The intelligent virtual user software agents also seamlessly take care of responding correctly to different data presented to them from the web system under test. This key feature, known as correlation, makes the behavior of the virtual users indistinguishable from real users and is essential to the execution of a valid, real-world, load test. If this is not done, the tests will not be realistic. At best, the results will be invalid and at worst the tests will indicate failure. This will waste time and money attempting to fix defects that do not actually exist in the operational system.

AppLabs' Remote Web Load Testing Service can demonstrate the actual performance of the infrastructure and applications at progressively increasing user levels up to the target concurrent user load, and beyond if required. This provides an understanding of end-user experience at

each incrementing load level. As part of the engagement, AppLabs' performance engineers will work with your technical teams to analyze, understand and explain the results gained from the load testing.

In the event that user load levels are not achieving expectations, our service includes additional analysis of the problem. The gathering and analysis of application and infrastructure performance metrics, together with our extensive experience of real-world performance issues provides you with a capability to remediate your web applications and internet infrastructure before real users are impacted.

When AppLabs has thoroughly performance tested your web systems in their production configuration, from distributed locations across the internet, you will have the maximum confidence that they will deliver their intended business goals. Users will appreciate a trouble free experience, customer loyalty will be enhanced and your business will reap the rewards.

AppLabs has 250 unique load generating servers dedicated to performance testing hosted behind 550Mbps of bandwidth and many hundreds of optional load generators that can be added to the infrastructure and at partner hosting facilities as needed for larger test engagements. We provide the infrastructure to accurately generate the target user load for all performance test engagements. We maintain dedicated load generators in the following areas/ time zones:

- ▶ Eastern (100Mbps);
- ▶ Central (100Mbps);
- ▶ Mountain (155Mbps);
- ▶ Pacific (100 Mbps);
- ▶ UK (100Mbps);
- ▶ India (Limited Bandwidth).