

## PERFORMANCE TESTING OF A LEARNING MANAGEMENT SYSTEM

### Client profile

Client is a Canada based company engaged in educational services. They have build a Learning Management System for Learning content management, user management, assignment management and result analysis reports etc.

### The Challenge

The Client had this already developed project for providing educational services to the clients. The project is based on C#, SQL Server and used used too may stored procedures to perform operations on data. The System has poor performance because of long response time everywhere while using the system.

The Client engage us to identify the major performance bottlenecks, cause of these bottlenecks so as to fix them to improve the performance.

### Our Solution

- After sessions of engagement with client our team come up with a test plan.
- Team built a suitable test environment to simulate the client environment.
- Team created the test data to run the tests for the actions where client had performance issues.
- Our team listed out the set of actions, current response time and the maximum acceptable time for those actions.
- We filtered out the action that were taking long to execute than the maximum acceptable time.
- Used SQL Server Profiler to track the stored procedures that were used by these time consuming actions.
- Analysed the track logs to identify the performance bottlenecks and the reason behind.
- Identified that either stored procedures are taking too much time to run or running more than once per action for some actions.
- Prepared the test report and provide the client with suggestions to improve the performance.

### Benefits delivered

- The Project got acceptable quality and user experience.
- With improved system Client's user base increased.