

Client: A large Australian water distributor and provider

Project: Self-service timesheet portal and payroll system upgrade

TOOLS & TECHNOLOGIES



- Visual Studio

ABOUT US

Our services are purposefully designed to provide a cohesive experience for organisations embarking on digital transformation. Our business aptitude is your advisory, our technical skills are your project delivery and our training roots enables your team to build upon success.

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BACKGROUND

One of Australia's largest water distributors required an upgrade of their self-service timesheet portal and payroll system. Originally installed to save company resources, the component began experiencing performance issues under concurrent user load. Organisation employees reported it taking up to 30 minutes per week to fill out their timesheet, which caused frustration and proved costly to the business.

CHALLENGE

A quick performance hotfix was applied to allow the team to continue using the system while a newer version was discussed. It was important to the organisation that the new software did not exhibit similar performance issues as the original roll-out demonstrated. With over 21 years of expertise in risk management and software quality and assurance, they engaged KJR to assist with this implementation.

SOLUTION

As a trusted advisor, KJR performance-tested the new version, specifically focusing on the key functionality that experienced performance issues previously. The performance tests generated a realistic load level based on analysis of current production use. The aim was to ascertain where the performance issues were and what could be done to mitigate them.

KJR developed the test plan using its own quality assurance automated testing methodology. Performance tests were prepared including scripting and selection of data executed using Visual Studio Enterprise Coded Web Test with KJR's own in house libraries for handling Forms on ASP.NET Update Panels.

The testing simulated the population of timesheets, as well as the team leader approval process, at concurrent user level at and above the existing peak user count. This ensured that many users were simulated to put the required load on the application to discover how stable it was under the heavy conditions. The test ran several times at different levels to allow for a comparison of results and to confirm the probability of the application slowing or failing, as the number of users increased.

DELIVERABLES

- Test plan and strategy.
- Prepared data selection and test scripts for performance testing
- Executed test scripts for performance testing using Visual Studio .
- Ran load tests
- Uplifted the team's capability in testing by advising on test principles and practice.

KEY OUTCOMES

- Ran successful load tests which worked effectively on the newer version of the payroll and timesheet applications, assuring high number of users was not going to be of detriment to the new system.
- KJR consultants were able to adapt the automation framework in accordance with system constraints. Offering a flexible approach for the delivery of a successful software.