TAFE SA Undertakes Load Testing to Reduce System Risks Associated with US$20 Million Project

TAFE SA provides vocational training and education to students across three institutes in South Australia—two in metropolitan Adelaide and one covering regional areas. It delivers courses to 80,000 students per year across 53 campus locations. The organization is part of the South Australian Department of Further Education, Employment, Science, and Technology, which provides skills and training, employment programs, scientific and innovative planning, in addition to workforce development throughout the state.

Challenges

- Minimize risk by simulating the impact of user demand on the new student information system and associated hardware that is built and configured around standardized processes
- Ensure a smooth transition from a 20-year-old system that caused student enrollment practices to vary considerably across campuses, resulting in irregular updating and disruptions in student administration and services

Solution

- Deployed Oracle Application Testing Suite with Oracle Forms and Oracle Load Testing to automate testing of the banner student information system SIS, comprised of three main user applications for general administration of student information; student search, application process, and course registration; and a Web portal that provides single sign-on to TAFE SA resources
- Minimized performance risks by load-testing links between remote TAFE SA campuses and the central office by simulating concurrent usage by 40 employees at two regional sites and 1,600 employees at the central office
- Ensured that Oracle databases storing tens of thousands of student records could scale to meet demand without compromising speed or responsiveness
- Delivered consistent testing scenarios that ensured accurate configuration changes on application and database servers as well as for SIS and that problems were solved before the system was deployed into production