Going Green with TAO at The Colombian Institute for the Promotion of Higher Education (ICFES)

The Colombian Institute for the Promotion of Higher Education (ICFES) Finds an Effective Path from Paper-Based to Computer-Based Testing

BACKGROUND

ICFES Moves from Paper-Based to Computer-Based Testing

ICFES is responsible for administering the SABER PRO examination, which is a mandatory graduation requirement for college students in Colombia. Approximately 75,000 students take the examination each year.

In recent years, national policy planners in Colombia have urged ICFES to consider moving from paper to computer-based testing. Reasons for the change are to save time in processing the analysis of results, and to be consistent with "green" policy, which is expected of government entities.

However, while this change seemed like the right thing to do, ICFES wanted to be certain that challenges effectively addressed in the paper-based world would also be addressed with computer-based testing. Specifically:

- Keeping the test in close custody so that the content does not become available in advance to any inappropriate parties
- Preventing peer-to-peer communication among test takers to avoid cheating
- Preventing access to any sources of information that might assist the test-taker during the exam and thus compromise results

CHALLENGE

Researching and Selecting a Computer-Based Testing Solution

Before considering TAO as a solution in the transition from paper to computer testing, ICFES identified 20 possible platforms available on the market. After looking at each platform's usage history and maturity, reported user experience, other documentation, and the type of licensing required, the field was narrowed to eight possible choices.

Over a period of several months, ICFES used benchmarks to conduct performance analyses of the various platforms, filtering through each possibility to see which would be most efficient for their purposes. Based on the conclusions of the various workbench reports, they selected TAO as the best available option.

Stay Connected

SOLUTION

TAO, a Secure, Flexible Open Source Assessment Platform

TAO's Open Source nature allowed ICFES to draw upon strong community support in successfully addressing a variety of needs, including:

· The ability to customize each test delivery
· Easy management of test dates and times
· Randomization of test items, and
· Integration of TAO with the existing item bank

Also, TAO can protect online test items from unauthorized parties by allowing access only from each test center's IP address. Furthermore, TAO is compatible with the SEB (Safe Exam Browser), which ICFES utilizes to prevent test-takers from leaving the exam itself to surf the net or use other programs on the computer. These capabilities effectively addressed ICFES' concern about keeping the test content secure and ensuring the integrity of the results.

RESULTS

Implementing the Tao Open Source Solution

The full implementation of TAO within ICFES took seven months. ICFES was able to implement the platform using a cloud computing solution that supports Amazon. The results have shown significant progress towards the achievement of their specific goals, including increases in both the number of test takers and the number of tests offered using TAO as a platform.

The paper-based system has historically served 75,000 students taking the SABER PRO exam each year. TAO will enable ICFES to shift 40% (30,000) of those students to the computer-based system this year, and the remaining 60% (45,000) in 2015.

Juan Sebastian Mendez, e-Test Technical Leader at ICFES, reports that, "TAO, as a product out of the box, gives a wide variety of possibilities. The support provided by TAO via email or forum always delivers a solution to almost any problem we have encountered."

He further reports that the TAO community has taken an important role in the project, helping them avoid significant delays in achieving their goal of moving successfully from a paper-based to a computer-based testing environment, while increasing both the number of test takers and the number of tests offered.

Open Assessment Technologies S.A.
9, avenue des Hauts-Fourneaux
L-4362 Esch-sur-Alzette, Luxembourg

Stay Connected