



## Bridgewater State University

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Bridgewater State University (BSU) is the 10th largest higher education institution in Massachusetts, with 11,000 students and more than 90 areas of study.

As one of its core values, BSU puts a strong emphasis on being responsive to student needs – from small class size and an outstanding faculty to a smooth registration experience and systems that are ready to handle heavy usage load around the clock.

## Challenges

- Ensure a timely student registration process with no performance delays
- Achieve a high level of confidence that expected registration loads can be adequately handled by its Ellucian Banner registration system
- Perform stress tests that accurately replicate student registration scenarios

## Solution

- Selected WebLOAD as the load testing tool of choice for the Ellucian Banner registration system as well as future upgrades and extensions
- Instituted a proactive performance assurance process that includes frequent load tests
- Allocated dedicated resources to ensure that load testing best practices and policies are followed

## Results

- Performance testing that accurately replicates student registration scenarios and can be easily adapted to any changes in the process
- An ongoing performance testing process that provides BSU with the confidence that registration will run smoothly with the expected user loads
- A solid foundation for load testing Banner 9 ahead of the planned upgrade

“WebLOAD gives us the confidence that our Ellucian software can operate as expected during the peak demands of registration.”

*Thanks to the outstanding support from RadView, we now have the best practices in place to ensure uninterrupted performance of our systems.”*

**Steven Zuromski, Associate Vice President of IT,  
Bridgewater State University**

## Challenge: withstanding the load of student registration

Competition for students is high and successful class registration periods are critical for any higher educational institution. While Bridgewater State University (BSU) had enjoyed years of successful registrations, the worst-case scenario came true following a database upgrade last year. Even though BSU performed load testing after implementing the new database, they only had a snapshot of the system.

Being unable to accurately simulate a complete registration process with the expected load, they missed crucial issues that ultimately led to failure at the most unfortunate time.

To avoid this issue in the future, BSU decided to take sweeping corrective actions, including:

- Assign the ownership of load testing to a dedicated resource
- Seek a load testing solution that can simulate the exact student registration load and scenarios
- Establish continuous load testing processes and best practices for early detection of any performance issues

## Solution: best-in-class load testing software coupled with best practices

To support their new and rigorous approach to performance testing, the team at BSU looked for a partner that could not only provide best-in-class tools but also help in establishing the appropriate processes and best practices to ensure the highest level of preparedness.

“RadView was the clear winner. They are not just an Ellucian partner but also the performance tester of choice for Ellucian R&D and services teams, and really stepped up to provide the professional services support we needed,” stated Steven Zuromski, associate vice president of IT for BSU. “In addition, WebLOAD not only mimics actual volumes and scenarios, it has so much additional functionality for future planning that I sleep soundly at night knowing we will be prepared for future registrations.”

To emulate a realistic user load, the BSU team has analyzed past registration scenarios and recreated them as test cases in WebLOAD. Because different classes register at different times, separate tests were performed for grad students, seniors, juniors, sophomores, and freshmen.

Thanks to WebLOAD’s advanced correlation and parametrization capabilities, they were then able to insert real user data and validate it to ensure the tests reflected what real registrations would look like.

One of the key transformations made by BSU was establishing a process of testing early and often. Instead of the quarterly tests they used to perform, they now run load tests after every change to the system. “Any application upgrade or even database parameter change can impact performance. Now we can catch any issues immediately after a change is introduced rather than wait for the next quarterly scan,” explained Zuromski.

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## Results: high level of confidence in the resiliency of Ellucian to support flawless student registration

Using WebLOAD with unlimited scans and 1,000 virtual users, BSU was able to establish a strong baseline for future registration performance. Even while the tests were still running, the team was able to look at the results and feed them back to the technical teams.

“It was amazing to see what we could accomplish with WebLOAD. There is more data than I could imagine, and we have only scratched the surface of what we can do with the WebLOAD analytics,” said Linda McNeilly, system analyst for BSU, who is now the technical lead for the load testing process.

*WebLOAD is a critical component of BSU's technology roadmap moving forward as they continue laying the foundation for upgrades to Banner 9 and beyond.*

BSU used their registration issue to strengthen their technology and processes. They not only have the technical components prepared for registration, but also the contingency plans in place with pre-assigned staff roles and pre-approved communications to handle any future issues.

WebLOAD is a critical component of BSU's technology roadmap moving forward. As they continue laying the foundation for upgrades to Banner 9 and consider adding Oracle Database Appliances at their main location and co-location facilities, they will use WebLOAD to test the system after every upgrade and before every registration.

Throughout the process, the RadView support staff was on hand to help the BSU team. “Having the professional support services made all the difference,” said Zuromski. “We are now confident that we not only have the software to ensure a flawless registration, but also the training and best processes to ensure our future registrations are flawless.”

