



the need

Heavy workload periods such as registration can tax even well-designed Banner database systems and strain the patience of students, faculty and administrators. Painfully slow response times, browser timeouts and unknown error messages only add the stress. Unfortunately, solving these and other temporary performance problems is difficult. The bottlenecks occur and then go away. Monitoring the system components during heavy times can pinpoint the trouble spots, but it is difficult to adjust system components and measure for response improvement during the heavy load.

the product

Inplexus has developed a load testing service that will simulate heavy activity. By configuring load-testing software to reproduce registration activities, we can simulate hundreds or thousands of virtual users. During the load, measurements can be taken on the database, the database machine, the application server, the application server machine and the network. As a bottleneck is displayed in one of the system components, that component can be adjusted. Once the component is adjusted, the test can be run again to determine if the adjustment improved the response time.

Since different types of load will often tax system components in different ways, a variety of test scenarios can be run to analyze the system for performance problems during heavy activity such as:

- Registration for courses including adding and dropping classes;
- Faculty reviews of class rosters;
- Searches for open courses;
- Student and faculty review of academic advising information;
- Student and faculty evaluation of options if majors were changed.

the inplexus value

Inplexus will come on site and work with the technical staff to test the system and suggest tuning options. The advantages of scheduled load testing include:

- Running multiple tests in a controlled environment (perhaps on a test system);
- Making adjustments to a component to see if that component performance improves;
- Quantify the precise amount of load that can be handled by the system components for test scenarios.

After the load test and performance tuning, the database administrator will understand:

- How much load the database can handle (searches, registrations, etc.);
- How much load the application server can handle (throughput, concurrent users, etc.);
- Whether or not the network is experiencing bottlenecks under heavy loads.

Let us help you get the maximum efficiency from your Banner database. Thank you for considering Inplexus.