Back To School Usage: Providing A Stable Virtual Classroom Experience With Blackboard Collaborate

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Product: Blackboard Collaborate

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Bulletin/Advisory Information: Please see the text below, or on the Blackboard Community site at https://community.blackboard.com/blogs/10/433, for a message about Blackboard Collaborate Back-to-School usage from Tim Tomlinson, Blackboard's Chief Product Officer.

As institutions and learners around the globe transition into Back-to-School mode, we have again seen record usage of Blackboard Collaborate as a virtual classroom environment. We are seeing a 50% increase in concurrent users (people logged into Collaborate at the same time) compared to the record high usage from March and April. Our engineering teams have been working diligently to ensure that our delivery exceeds Blackboard's high standards of service availability and quality. We are very pleased to report that the vast majority of our millions of users are having a high quality experience in accessing and using Blackboard Collaborate. Still, during this challenging time, there is more to do in order to deliver the best possible online experience as more schools bring students back to class virtually.

We recognize that some of you are being asked by your respective leadership teams to understand how our development and product teams are working to support your virtual classrooms. Ensuring ongoing stability and scalability are our top priorities for Blackboard Collaborate.

Scaling to Meet Increased Usage

Earlier this year we implemented architectural changes to better leverage scaling without limitations, and we have been able to successfully accommodate more than 75 times the level of usage compared to a year ago. Blackboard Collaborate utilizes a combination of scaling mechanisms to ensure that we have sufficient capacity to accommodate the increased usage we have seen due to COVID-19. We continue to make further enhancements to Blackboard Collaborate's scaling and load balancing behaviors, such as leveraging Amazon Web Services (AWS) predictive auto-scaling, which uses machine learning to assist with usage forecasts. Blackboard Collaborate can now run on a very diverse set of instance types in AWS which allows us to take advantage of the virtually unlimited capacity that AWS offers. Additionally, Blackboard Collaborate was built to dynamically adjust and optimize the experience depending on the network performance. These are just a few examples of our ongoing investment in making Blackboard Collaborate the best virtual classroom environment to meet your needs.

Rapid Development and Updates to Ensure Reliability

The Blackboard team makes effective use of industry-leading application performance monitoring tools to closely observe the health and capacity of the Blackboard Collaborate components and respond to unforeseen issues within minutes. Occasionally, a Blackboard Collaborate component may experience disruption a very small scale, which may impact a small subset of overall users for a short duration, but in a disruptive way. These issues have not increased in overall percentage, but have grown in impact given the increased usage and dependency on the virtual classroom.

When any issues are observed or reported, our team immediately prioritizes the investigation to identify the root cause and address it. Blackboard is committed to delivering a high-quality experience, and often we're able to release improvements within days. In recent days, we have released several of these code improvements and we are seeing the expected improvement in the overall user experience.

We are continuously monitoring system performance and stability, and when any issues occur we keep our clients informed through status.blackboard.com

Delivering the Best Experience Together

Understanding if an issue is affecting all attendees in a session or only a subset is a key piece of information. A situation where it is just a subset is indicative (in most cases) of an issue outside of the Blackboard Collaborate environment (e.g. with network conditions connecting to the service or device configuration.) At this time internet providers are also seeing unprecedented usage and trying to adjust their load with varying degrees of success, and it most significantly impacts the experience while videoconferencing. Network performance and reliability may vary throughout the day and the week, which means a user may experience some level of variability with the quality of their session, too.

We have a series of support resources available to help your faculty, students and staff get the best experience on Blackboard Collaborate:

- Network Connection Management

- Browser Support

- Blackboard Collaborate Best Practices

We are also developing additional resources for your faculty, students and staff. That information will be available on the Community Site and our help site.

We believe that these actions, and others that we have already taken, have put us in the best possible position to support you and your students as we all work together to maintain continuity of teaching and learning during this challenging period. We will continue to provide updates on a regular basis.

As parents, students and educators here at Blackboard, we know that any disruption to the learning experience is one too many. We believe that by continuing to work together we are all best positioned to enable your learners and educators to maintain continuity of education.