Blackboard Help

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Assessment Schema Changes

Enhancements in the assessment feature introduce schema changes upon upgrading from Service Pack 7 and below to Service Pack 8 and above. When Learn starts up after the upgrade, a background process updates assessment data for each course in batches of 100 courses. The assessment upgrade process should take less than an hour for most Learn instances, which have less than 2 million rows in the `qti_result_data` table and an average of 10,000 attempts per course. The assessment upgrade process might take a couple days for extremely large institutions, which have more than 100 million rows in the `qti_result_data` table or have a course with more than 1 million attempts.

When the update begins, you'll see this line in the `bb-services-log.txt` file:

```
Starting bulk upgrade of assessment data (in groups of 100)
```

After the update ends, you'll see this line in the `bb-services-log.txt` file:

```
Finished bulk upgrade of assessment data
```

Learn instances can be restarted while the bulk upgrade is in progress. The task will simply resume from where it left off once the server starts again.

Users can still use the system while this upgrade is in progress because courses are upgraded immediately when a user enters a course that isn't updated, however, users aren't permitted to access assessments until the immediate update process is complete.

Based on our performance testing, users who are waiting for their course's assessment data to be updated shouldn't have to wait longer than a minute for most courses, which have less than 10,000 attempts.

The response time estimates stated above can vary depending on hardware capabilities and server configuration. Based on our experiments, performance can improve up to 50% when more memory is allocated to Oracle.

We strongly encourage clients to update database statistics prior to upgrading. We also encourage clients to test on a staging environment prior to upgrading the production environment.