

# Blackboard

## Performance Issues Associated with Large Amounts of Terms in Ultra Sites or Frequent REST API queries

**Date Published:** Jun 18,2021 **Category:** Planned\_First\_Fix\_Release:SaaS\_v3900\_17\_0,SaaS\_Fixed;  
Product:Data\_Management\_and\_Integrations\_Learn,My\_Blackboard\_Learn,Performance\_Learn; Version:Ultra **Article No.:** 000075451

**Product:** Blackboard Learn

**Release:** SaaS

**Service Pack(s):** Ultra

**Description:** Performance degradation could occur due to frequently checking the Terms of a user's course enrollments. Because the Ultra user interface uses the REST API to do this, the issue is most prominent in Ultra.

**Steps to Replicate:** **Prerequisite:** The site must have the Ultra Base Navigation enabled.

1. Create about 1,000 Terms or more
2. Create many Courses and add them to the Terms
3. Enroll Student and Instructor users in the Courses
4. Students and Instructors switch among their Courses by the "Courses" entry of the Ultra Base Navigation Pane as usual.

**Expected Behavior:**

The performance is steady.

**Observed Behavior:**

Performance declines.

**Prerequisite:** An API application that queries the user membership endpoint is needed.

Another way to replicate this issue is with calls to the REST API. This *does not* specifically require Ultra to be enabled.

1. Repeat steps 1-3 above
2. Frequently query the API endpoint `users/{userId}/memberships`

**Expected Behavior**

The performance is steady.

**Observed Behavior**

Performance declines.

**Symptoms:** Performance issues can arise with querying user memberships there are extremely large amounts of Terms.

**Cause:** The Ultra "Courses" component looked up Course Terms inefficiently.

The underlying data access operation was not optimally cached.

**Resolution/Workaround:**

1. Terms are now Cached more efficiently.
2. The frequency and manner with which Ultra queries Terms was optimized.

**Information:** Issue fixed in 3900.17 release

**Target Release:** SaaS - Fixed (v3900.17.0)

**Patch Available:** No