

# Blackboard Help

[Learn](#) / [Administrator](#) / [Self- and Managed-Hosting](#) / [Release Notes](#) / [Individual Releases](#) / [9.1 SP 12](#)

## Performance and Scalability in Blackboard Learn 9.1 SP 12

---

Blackboard continuously invests in making Blackboard Learn more responsive and capable of handling greater volumes of user traffic with each release. This section of the release notes describes the performance and scalability issues addressed within this release of Blackboard Learn, as well new information about optimizing the configuration.

Performance issues occur when application responsiveness for a system not under load fails to meet user expectations. Scalability issues occur when application responsiveness or stability of a page request for a system under load fails to meet user expectations.

Issues are identified by clients through our traditional support channels and as a result of the performance and scalability exercises performed as part of all Service Pack releases.

### In this section...

Apache 2.2 HTTP Server

Assessment Schema Changes

MS SQL Data Type Changes

Performance Improvements

Recommended Deployment Approach

Recommended JVM Tuning Set

SIS Logging