Using a Local Caching Server (LCS) with Kite

LCS Overview

Depending upon the number of students testing at once, the traffic on your local network, and the speed and quality of your Internet connection, the amount of data being sent or requested at any one time can be large. An LCS can be installed to facilitate transmission of test questions and student responses between your local network and the main Kite servers, thus reducing potential network issues during live testing. The LCS will cache content during the request phase and collecting responses for streaming to the central testing system as bandwidth allows.

You can deploy an LCS in a classroom or in a lab, or it can be installed on a regular desktop-class device or on server-class equipment at a district level to be used by multiple buildings.

> **Note:** **While in use, the LCS will contain tests and student responses. Physical and remote access to the LCS should be managed in the same fashion as any other repositories of personally identifiable information (PII) in compliance with FERPA and all relevant state and federal laws.**

While operating, the LCS stores testing data in an internal database. Therefore, if the upstream network connection becomes unreliable (or variable) during testing, students can continue testing and their responses will be transmitted to the Kite servers as bandwidth allows.

> **Note:** **Once a student starts a test using an LCS they must complete the test on the same LCS. Changing servers during the test may cause errors during testing.**

System Requirements

Your machine must meet or exceed the requirements in the table below.

> **Note:** **The specifications listed are the minimums that must be available for the LCS to use. These are NOT overall machine specifications.**

Minimum Processor	Minimum RAM	Minimum Disk Space Available for LCS
2 GHz	4 GB	3 GB

Semi-Offline Mode

Semi-offline mode is the default setting for LCS. In semi-offline mode, the LCS submits and receives data to and from the AAI servers while the students are taking tests. If the Internet connection becomes unreliable or too slow to transmit all of the data, the LCS will cache (temporarily store) test questions and student responses and send them when bandwidth becomes available. Semi-offline mode works best if your location has a robust Internet connection with only occasional fluctuation in bandwidth.