Assessment Delivery System (ADS) 
Platform Technical Specifications for the 
Illinois Science Assessment (ISA) 

January 25, 2019

Secure Testing Requirements

In order to deliver student tests, all testing devices will be required to have the correct version of the Safe Exam Browser (SEB) deployed. Please follow the instructions found on the ISBE ISA site for additional download information.
Frontend Specifications

(For Desktops/Laptops/Tablets)

These system specifications are for recommended devices, browsers, and operating systems considerations. The system has been tested against these specifications and any reported issue resolved accordingly. However, the system may fully function or partially function with non-specified devices, browsers, and operating systems.

Workstations
These are the recommended specifications for a test-taker workstation.

PC Processors
- Pentium Intel Core +
- 2.4 GHz or better (may be slightly reduced for Mac users)

RAM
- 512 MB or better is required by the ADS Platform.
- Note: Many of the Supported Operating Systems require 2 GB or higher RAM

PC Operating System(s)
- Windows 7, Windows 8.1, Windows 10

Mac Operating System(s)
- Mac OSX 10.11 or better

Chromebook
- Chrome OS 68 through OS 71

iPad
- OS 10.0 or better

Linux
- Fedora 22, Ubuntu 12.04, Ubuntu 14.04
**Screen Resolution**
A minimum screen resolution of 1366 X 768 or higher is recommended.

**Target browsers**
Auto-update is recommended for Chrome and Firefox browsers.

<table>
<thead>
<tr>
<th>Windows OS</th>
<th>IE11+</th>
<th>Chrome</th>
<th>Firefox</th>
<th>Edge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Win 7 Minimum</td>
<td>Yes</td>
<td>46+</td>
<td>42+</td>
<td>NA</td>
</tr>
<tr>
<td>Win 8.1 Recommended</td>
<td>Yes</td>
<td>46+</td>
<td>42+</td>
<td>NA</td>
</tr>
<tr>
<td>Win 10 Recommended</td>
<td>Yes</td>
<td>46+</td>
<td>42+</td>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mac OSX</th>
<th>Safari 10.0+</th>
<th>Chrome</th>
<th>Firefox</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.11 Recommended</td>
<td>Yes</td>
<td>46+</td>
<td>42+</td>
</tr>
<tr>
<td>10.12 Recommended</td>
<td>Yes</td>
<td>46+</td>
<td>42+</td>
</tr>
<tr>
<td>10.13 Recommended</td>
<td>Yes</td>
<td>46+</td>
<td>42+</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Linux Distributions</th>
<th>Chrome</th>
<th>Firefox</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fedora 22 Recommended</td>
<td>46+</td>
<td>42+</td>
</tr>
<tr>
<td>Ubuntu 12.04 Minimum</td>
<td>46+</td>
<td>42+</td>
</tr>
<tr>
<td>Ubuntu 14.04 Recommended</td>
<td>46+</td>
<td>42+</td>
</tr>
</tbody>
</table>

Chrome OS
68+
Note: Chromebooks or Chromeboxes

iPad OS
10.0+
**Browser Specifications**
Cookies, JavaScript, Images enabled

**Screen Size**
9.5 inch screen or better

**Color Depth**
High Color, 16 Bit

**Input Devices**
Wired or wireless keyboard w/ mouse or touchpad

**Audio**
Earbuds, headphones are required for assessments should they contain audio

**Disk Space**
100MB free space

**Frameworks/3rd party app components**
None.

**Touch Screen Compatibility**
Not officially supported. However, the system may fully or partially function with touch screen capabilities.

**Tablets**
These are the specifications targeted for a user of the system’s own mobile device.

**Platform**

<table>
<thead>
<tr>
<th>In scope</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple iOS</td>
<td>10.0+</td>
</tr>
<tr>
<td>Android</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Windows</td>
<td>8.1</td>
</tr>
</tbody>
</table>

**Screen resolution**
No specification defined; can vary greatly between hardware. It is recommended that a tablets have a 9.5 inch or larger screen. Devices will smaller screen resolution will be subject to scrolling.
Infrastructure Specifications

Bandwidth

The following table identifies the requirements for Internet connectivity to conduct an ISA assessment:

<table>
<thead>
<tr>
<th>Minimum</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>250 kb/sec/student</td>
<td>300kb/sec/student</td>
</tr>
</tbody>
</table>

Connectivity to the Internet is required to start, take, and complete the assessment. Constant internet connectivity is required at the minimum bandwidth. Additionally, today, the item content of the entire test JSON is downloaded into memory when the test starts. Images are not downloaded until the related question is reached during the test. If a student is disconnected in the middle of test session, he or she can still navigate between items and view the items, but there’s a chance they will not see the images.

Firewalls, Content and Spam filters

Firewalls, content and spam filters must be set to allow access to ADS platform domains.

The following must be opened in any firewalls, proxy servers, or software that is used for internet content filtering:

- *.ileducates.org
- https://isbe-isa-prod-tap.s3.amazonaws.com
- https://fonts.googleapis.com
- https://fonts.gstatic.com
- https://sec2.isbe.net
- https://js-agent.newrelic.com
- https://bam.nr-data.net
- d12absk6swphg7.cloudfront.net
- d2xk9byr7zaf37.cloudfront.net
- https://breaktechisbetoolbar.speechstream.net/
- https://breaktechisbecache.speechstream.net/
- https://breaktechisbeservices.speechstream.net/
- http://breaktechisbeservicesbackup.speechstream.net/
- https://speechstreamtoolbar.speechstream.net/
- https://speechstreamtoolbar-webservices.texthelp.com/
- https://speechstreamservicesbackup.speechstream.net/
- themes.googleusercontent.com
- www.google-analytics.com
Minimum Testing Station Specifications

If testing on **Windows Desktop/Laptop** devices:

<table>
<thead>
<tr>
<th>Item</th>
<th>Minimum</th>
<th>Recommended</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PC Processor</strong></td>
<td>Pentium Intel Core + 2.4 GHZ or better</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAM</td>
<td>2GB min</td>
<td>4 GB</td>
<td>The ADS requires up to 512MB</td>
</tr>
<tr>
<td>Screen Resolution</td>
<td>1366 x 768</td>
<td></td>
<td>1366 X 768 minimum resolution</td>
</tr>
</tbody>
</table>

If testing on **Windows Tablet** devices:

<table>
<thead>
<tr>
<th>Item</th>
<th>Minimum</th>
<th>Recommended</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PC Processor</strong></td>
<td>Intel Core i5 or better</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAM</td>
<td>2GB min</td>
<td>4 GB</td>
<td>The ADS requires up to 512MB</td>
</tr>
<tr>
<td>Screen Size recommendation</td>
<td>9.5&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If testing on **Mac Desktop/Laptop** (not tablets) devices:

<table>
<thead>
<tr>
<th>Item</th>
<th>Minimum</th>
<th>Recommended</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Processor</strong></td>
<td>Intel CPU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAM</td>
<td>2GB</td>
<td>4 GB</td>
<td>The ADS requires up to 512MB</td>
</tr>
<tr>
<td>Operating Systems</td>
<td>Mac OSX 10.11</td>
<td>Mac OS 10.11+</td>
<td></td>
</tr>
<tr>
<td>Screen Size</td>
<td>1366 X 768 minimum resolution</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
If testing on **Linux Desktop/Laptop** (not tablets) devices:

<table>
<thead>
<tr>
<th>Item</th>
<th>Minimum</th>
<th>Recommended</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Processor</strong></td>
<td>Pentium Intel Core + 2.4 GHZ or better</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RAM</strong></td>
<td>2GB</td>
<td>4 GB</td>
<td>The ADS requires up to 512MB</td>
</tr>
<tr>
<td><strong>Operating Systems</strong></td>
<td>Fedora 22, Ubuntu 12.04, Ubuntu 14.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Screen Size</strong></td>
<td>1366 X 768 minimum resolution</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Browsers</strong></td>
<td>Chrome 46+, Firefox 42+</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If testing on **Chromebook/Chromebox** devices:

<table>
<thead>
<tr>
<th>Item</th>
<th>Minimum</th>
<th>Recommended</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Processor</strong></td>
<td>Any</td>
<td>Any</td>
<td>The ADS requires up to 512MB</td>
</tr>
<tr>
<td><strong>RAM</strong></td>
<td>2GB</td>
<td>4 GB</td>
<td></td>
</tr>
<tr>
<td><strong>Operating Systems</strong></td>
<td>68.0.0.0</td>
<td>69.0, 70.0, 71.0</td>
<td>As a best practice, the test will run on the most recent three versions of the Chromebook OS.</td>
</tr>
<tr>
<td><strong>Screen Size</strong></td>
<td>9.5&quot;</td>
<td></td>
<td>1366 X 768 minimum resolution</td>
</tr>
</tbody>
</table>

If testing on **iPad** devices:

<table>
<thead>
<tr>
<th>Item</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Systems</strong></td>
<td>iOS 10.0 or higher</td>
</tr>
<tr>
<td>Supported Versions</td>
<td>• iPad Pro 9.7 inch +</td>
</tr>
<tr>
<td></td>
<td>• iPad Air 2</td>
</tr>
<tr>
<td></td>
<td>• iPad Air</td>
</tr>
<tr>
<td></td>
<td>• iPad 4th generation</td>
</tr>
<tr>
<td></td>
<td>• iPad 5th generation</td>
</tr>
<tr>
<td><strong>Screen Size</strong></td>
<td>9.5&quot;</td>
</tr>
</tbody>
</table>