

Technology Requirements for Text-to-Braille

Students taking the Smarter Balanced Field Test assessment who need Braille will access the Braille interface using the Smarter Balanced secure browser. In addition, students will use a combination of the supported Braille technologies described in this document to take the Smarter Balanced assessments. The vendors listed will provide support for the Braille-related hardware and software. Also, note that the online Field Test will offer contracted and uncontracted Braille at all grades and Nemeth Braille for mathematics.

Braille Hardware

The following devices are to be used for students accessing tests with a Braille accommodation.

- **For students:** A refreshable Braille display. It is recommended that the display have a minimum of 40 cells.
- **For Test Administrators:** View Plus Tiger Max Embosser



Reminder: All printed test materials for secure tests must be shredded immediately after a test session ends.

Braille Software

Requirements for Student Computers

- The Student Testing Site currently supports the Braille interface on Windows 7 machines only.
- Windows Secure Browser 6.3 must be installed on all machines used for student testing, including tests administered using the Braille interface. Detailed installation instructions are available on the Secure Browser page of the Smarter Balanced Portal (<http://sbac.portal.airast.org/>).
- JAWS Screen Reader (version 12, 13, or 14).
- Refreshable Braille display that is compatible with Windows 7 and the version of JAWS that is on the computer (12, 13, or 14). We recommend that the Braille display have a minimum of 40 cells.

For more information about JAWS, including product download and purchase, go to <http://www.freedomscientific.com/products/fs/jaws-product-page.asp>.



The following JAWS configuration must be applied to each student computer prior to administering tests using the Braille interface:

1. **Configure JAWS to recognize the Secure Browser.**
2. **Apply settings for Contracted/Uncontracted Braille through JAWS.**

Instructions for each requirement follow.

Configure JAWS to Recognize the Secure Browser

1. Open the **JAWS ConfigNames.ini** file.

This file is accessible via the Start menu (/All Programs/JAWS 12.0/Explore JAWS/Explore Shared Settings/).

2. Locate the line of text that contains “Chrome=Firefox.” Create a line immediately following this text, and add the following string: `SBACSecureBrowser6.3=Firefox`.
3. Save the file upon completion.

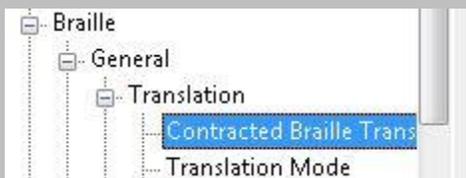
If you receive an error that you do not have permission to save the .ini file to this location, you will first need to save the file to your desktop as **ConfigNames.ini**. After saving the updated .ini file, copy it to the folder containing the original .ini file (referenced in Step 1). You will need to confirm that you want to replace the original file with the file you created.

Applying Settings for Contracted/Uncontracted Braille

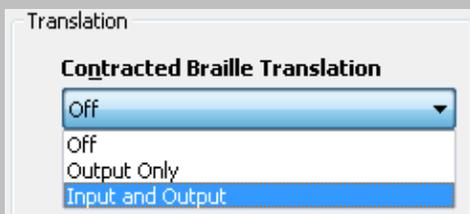
In order for students to use Contracted or Uncontracted literary Braille, the correct JAWS setting must be applied *prior* to launching the secure browser.

1. Open the **JAWS Settings Center**. The Settings Center is accessible via the *JAWS Menu > Utilities*.
2. Select **Firefox** from the “Application” drop-down menu.
3. From the panel on the left side of the window, go to the following option (as pictured):

Braille > General > Translation > Contracted Braille Translation



4. For **Uncontracted Braille**, set the value to “Off.”
For **Contracted Braille**, set the value to “Input and Output.”



Additionally, ensure that the following three settings are checked (and only these settings are checked):

- Active cursor follows Braille display
- Enable Braille Auto Detection
- Enable Word Wrap

Active cursor follows Braille display
 Braille display follows Active cursor
 Enable Braille Auto Detection
 Display text in 8 Dot Braille Mode
 Enable Braille Sleep Mode
 Enable Word Wrap

5. Click [Apply] and then click [OK].



In addition, the following optional JAWS settings may be adjusted for individual students based on student needs prior to administering their assessments.

- Adjust JAWS voice profile (Optional)
- Adjust JAWS speaking speed (Optional)
- Adjust JAWS punctuation (Optional)

Instructions for each option follow.

If adjusting these optional settings for a student, the steps described for each option must be taken prior to launching the secure browser.

Adjusting JAWS Voice Profile

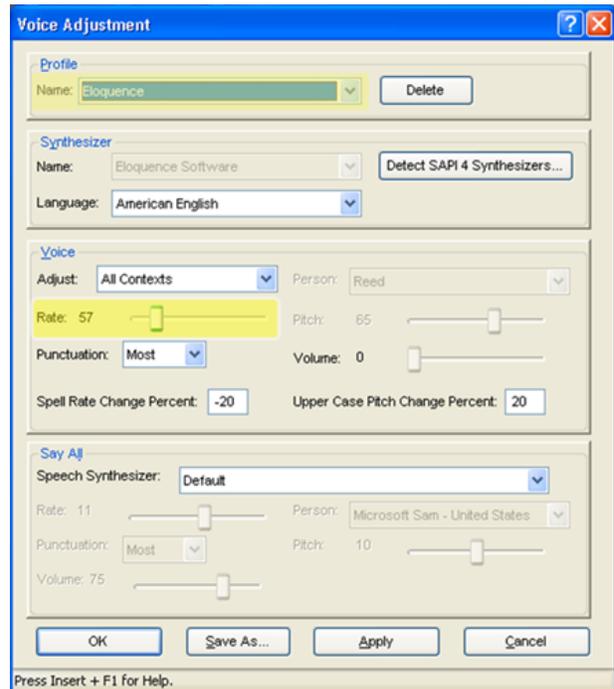
The JAWS voice profile refers to the voice used by JAWS. Users can adjust the JAWS voice profile by following the instructions below.

1. Go to *JAWS Menu>Options*.
2. Select *Voices>Adjustment*.
3. In the *Profile* section, select a Voice Profile from the “Name” drop-down menu.
4. Click [OK].

Adjusting JAWS Speaking Rate

Users can adjust the rate of speed that JAWS speaks by following the instructions below.

1. Go to *JAWS Menu>Options*.
2. Select *Voices>Adjustment*.
3. In the *Voice* section, adjust the “Rate” using the slide-bar.
4. Click [OK].



Adjusting JAWS Punctuation

The default JAWS punctuation setting for which the Braille Interface has been optimized is “Most.” This means that JAWS will read most punctuation that appears on the screen. However, users may adjust the JAWS punctuation based on an individual student’s needs and preferences by following the instructions below.

1. Go to *JAWS Menu>Options*.
2. Select *Voices>Adjustment*.
3. In the *Voice* section, select a punctuation setting from the “Punctuation” drop-down menu. The options include “None,” “Some,” “Most,” and “All.”
4. Click [OK].



Warning regarding ELA assessments and text-to-speech and JAWS

The secure browser is designed to automatically mute audio on ELA assessments. As a result, the sound on the student’s computer will be automatically muted when the student begins the first question on the Braille form of the ELA assessment he or she is taking. The sound will automatically turn on again when the student submits the ELA assessment or pauses the test and returns to the login screen.

As a result, students who use the secure browser to access the practice ELA assessments may be unable to hear listening stimuli associated with items. Students may also require assistance with JAWS navigation because they will not be able to hear the JAWS commands. JAWS will still output all commands and text to the refreshable Braille display, even with the sound muted.

If you want students to have access to audio during the practice ELA assessments, we recommend using Firefox instead of the secure browser.

Requirements for Test Administrator Computers

TAs administering tests to students who require Braille must have the following software installed on their machine prior to testing. The software is necessary to process these students’ print requests.

- **Duxbury Braille Translator 11.1**

This software allows printing of items and reading passages (without images) and can be downloaded from <http://www.duxburysystems.com/dbt.asp?product=DBT%20Win>.

For Oregon users: To download the Duxbury Braille Translator software and acquire a license, contact the Blind and Visually Impaired Student (BVIS) fund administrator for the seat license code.

- **ViewPlusTiger Max Embosser** and the supporting **ViewPlus Desktop Embosser Driver**

The Desktop Embosser Driver can be downloaded from <http://downloads.viewplus.com/drivers/desktop-Braille-embosser/>. The download includes the Tiger Viewer software, which is needed to handle print requests for items and passages that contain tactile or spatial components.

For questions regarding the online testing system or for additional assistance, please contact the Smarter Balanced Field Test Help Desk at 1-855-833-1969 or smarterbalancedhelpdesk@ets.org.