

# TECHNOLOGY COORDINATOR BROCHURE

This brochure provides a quick overview of the basic system and software requirements needed to administer the online assessments for the Vermont Comprehensive Assessment Program. Technology coordinators should consult the *Technical Specifications Manual for Online Testing* and the *System Requirements for Online Testing* for more detailed information.

## SECURE BROWSERS

A secure browser must be downloaded and installed on each computer and device used for student testing. For explicit instructions on downloading and installing the secure browsers, refer to the Secure Browser Installation Manual.

Supported Operating Systems		Supported Secure Browser
<b>Windows</b> 7 (Professional and Enterprise) 8.0 (Professional and Enterprise) 8.1 (Professional and Enterprise) 10 (Professional, Educational, and Enterprise) Server 2008, 2012, 2016 (thin client)		10.0
<b>Mac OS X</b> 10.7–10.8 10.9–10.12		9.5 10.0
<b>Linux</b> Fedora 25–26 <sup>a</sup> Ubuntu 14.04, 16.04 LTS (Gnome)		10.0
<b>Mac OS X (Intel)</b> 10.6–10.12		10.0
<b>iOS (iPads)</b> 9.2, 9.3 10.0, 10.2 11 <sup>a</sup>	<b>Android</b> 5.0, 5.1, 6.0, 7.0 (Nougat)	AIRSecureTest Mobile Secure Browser
<b>Chrome OS</b> 59+		AIRSecureTest kiosk application

<sup>a</sup> Support for this version will begin upon its release.

*All supported computers, laptops, tables, and approved testing devices must meet the following requirements:*

**Screen Dimensions**

Screen dimensions must be 10” or larger (iPads with a 9.7” display are included).

**Screen Resolution**

All devices must meet the minimum resolution. Larger resolutions can be applied as appropriate for the monitor or screen being used.

Desktops, laptops, and tablets: 1024 x 768

Netbooks: 1024 x 600

**Keyboards**

The use of external keyboards is highly recommended for tablets that will be used for testing. Students may use mechanical, manual, and Bluetooth-based keyboards.

**Headphones**

Wired headphones with a 3.5 mm connector or USB headphones (wired) are recommended over Bluetooth, as they provide better clarity and accuracy. For a full list of approved models, see the *System Requirements for Online Testing*.

**BASIC HARDWARE REQUIREMENTS**

Desktops		
Supported Operating Systems	Minimum Requirements	Recommended Specifications
<p><b>Windows</b></p> <p>7 (Professional and Enterprise) 8.0 (Professional and Enterprise) 8.1 (Professional and Enterprise) 10 (Professional, Educational, and Enterprise) Server 2008, 2012, 2016 (thin client)</p>	<p>1.1 GHZ Processor 512 MB of RAM 200 MB hard drive space</p>	<p>1.4 GHZ Processor 2 or more GB RAM 16 or more GB hard drive space</p>
<p><b>Mac OS X</b></p> <p>10.7–10.12 10.13<sup>b</sup></p>	<p>1.1 GHZ Processor 512 MB of RAM 200 MB hard drive space</p>	<p>1.4 GHZ Processor 2 or more GB RAM 16 or more GB hard drive space</p>
<p><b>Linux</b></p> <p>Fedora 25–26<sup>a</sup> LTS (Gnome) Ubuntu 14.04, 16.04 LTS (Gnome)</p>	<p>1.1 GHZ Processor 512 MB of RAM 200 MB hard drive space</p> <p>Required libraries/packages:</p> <ul style="list-style-type: none"> <li>• GTK+ 2.18 or higher</li> <li>• GLib 2.22 or higher</li> <li>• Pango 1.14 or higher</li> <li>• X.Org 1.0 or higher (1.7+ recommended)</li> <li>• libstdc++ 4.3 or higher</li> <li>• libreadline6:i386 (required for Ubuntu only)</li> <li>• GNOME 2.16 or higher</li> </ul>	<p>1.4 GHZ Processor 2 or more GB RAM 16 or more GB hard drive space</p> <p>Recommended libraries/packages: In addition to the required libraries listed under minimum requirements, the following should be installed:</p> <ul style="list-style-type: none"> <li>• NetworkManager 0.7 or higher</li> <li>• DBus 1.0 or higher</li> <li>• HAL 0.5.8 or higher</li> </ul>

Tablets and Chromebooks			
Supported Operating Systems	Supported Tablets		Related Requirements
<b>iOS (iPads)</b> 9.2, 9.3, 10, 11 <sup>b</sup>	iPad 2 iPad 3 4th Generation (Retina Display)	5th Generation (Retina Display) iPad Air iPad Air 2	See the <i>Technical Specifications Manual for Online Testing</i> for information about configuring iOS for online testing.
<b>Android</b> 5.0, 5.1, 6.0, 7.0 (Nougat)	Google Nexus 10 Asus Transformer Pad Asus Memo Pad	Dell Venue 10 HP Pro Slate 10 Samsung Galaxy Tab 4 Education	See the <i>Technical Specifications Manual for Online Testing</i> for information about configuring devices for online testing.
<b>Windows</b> 8.0 (Professional and Enterprise) 8.1 (Professional and Enterprise) 10 (Professional, Educational, and Enterprise)	AIR supports any tablet running these versions of Windows, but has done extensive testing only on Surface Pro, Surface Pro 3, Asus Transformer, and Dell Venue.		
<b>Chrome OS</b> 59+	Chromebook		See the <i>Secure Browser Installation Manual</i> for information about installing the secure browser in kiosk mode, a requirement for online testing.

<sup>a</sup> Support for this version will begin upon its release.

<sup>b</sup> Support for this version is anticipated upon the completion of testing following its release.

Contact the Vermont Comprehensive Assessment Program Help Desk for additional guidance.

Email: [vthelpdesk@air.org](mailto:vthelpdesk@air.org)

Phone: 1.844.218.1184