



South Dakota DSTEP Setup and Installation Guide

Spring 2016

Workstation Readiness

All workstations (desktops, laptops, and tablets) intended for use in the administration of the *DSTEP* Science Assessment must be set up and configured to test using Questar's student test delivery system. Specific instructions on installing the secure browser and verifying functionality can be found in this Setup and Installation Guide. If you have any questions, you can contact Questar by phone or email at:

- Phone: 866-644-6648
- Email: SDcustomersupport@questarai.com

System Requirements

The *DSTEP* Science Assessment will support desktops, laptops, iPads, Android tablets, and Chromebooks that meet the following specifications:

- Windows XP/Vista/7/8/2003/2008 (latest service pack) (NOTE: Windows 8 RT is not supported)
 - Includes 8.1
- Mac 10.6/10.7/10.8/10.9/10.10
- Android Tablets 4.2, 4.3, 4.4 for the following supported devices:
 - Google Nexus 10
 - Samsung Galaxy Tab 2 (10.1)
 - Samsung Galaxy Note (10.1)
 - Motorola Xoom
 - Motorola Xyboard
- iPad 2 or newer and iOS 7 or higher
- Chrome OS Chromebooks Versions 29 and higher (NOTE: Chrome OS manages and controls the upgrade process. We will review and confirm upgrades as they are released.)

See Appendix A for additional requirements and specifications.

Software Installation

The *DSTEP* Science online student assessment is a browser-based application that requires Internet connectivity, as well as the installation of the Questar secure browser prior to the beginning of testing.

Any computer or tablet that will be used for testing requires setup before a student can take a test. This setup can be done at any time, but must be performed no later than two weeks in advance of a scheduled test session so as not to interfere with the actual testing period.

For all setups, verify web content filters and/or firewalls whitelist the following domains and IP address:

*questarai.net, *questarai.com 173.213.225.107

Installation instructions for each different operating system are on the following pages:

- Windows — page 3
- Mac — page 7
- Android Tablets — page 10
- iPads — page 11
- Chromebooks — page 13

Verification of setup for all platforms is on the following page:

- Verification — page 18

NOTE: You will need your admin site Username and Password to complete this installation. Questar will distribute these to designated Test Coordinators via email. If you do not receive a Username and Password, contact Questar's South Dakota Customer Support by phone at 866-644-6648 or email at SDcustomersupport@questarai.com.

Desktops/Laptops – Windows

DTC Important Information [Edit](#)

Please refer to the Help tab for:

- Install and Setup Guide
- DSTEP and DSTEP-A Test Coordinator Handbook and Directions for Administering Manuals
- DSTEP-A Data Collection form and Rating forms

IMPORTANT DATES

***DSTEP and DSTEP-A Online Testing Window:** March 28-April 22, 2016

Test Administration Training Sessions:

- Session 1: February 17, 2016
- Session 2: March 16, 2016
- Session 3: March 23, 2016

Administration Center [Edit](#)

IMPORTANT: Confirm you are always working in the correct administration. In the upper right hand corner:

- Select "DSTEP Science" to print logins and access reports for the Science assessment.
- Select "DSTEP Alternate" to access the Collection of Evidence Tool and reports for the Alternate Science assessment.

From this site you can manage the users and students at the participating schools.

Operating System	Secure Browser
Windows 7+	QAI Secure Browser
Windows XP and Vista	QAI Secure Browser
Mac OS 10.9+	QAI Secure Browser
Mac OS 10.6 - 10.8	QAI Secure Browser
Android	QAI Secure Browser
iPad app	Questar app
Chromebook Kiosk App	Chromebook Client

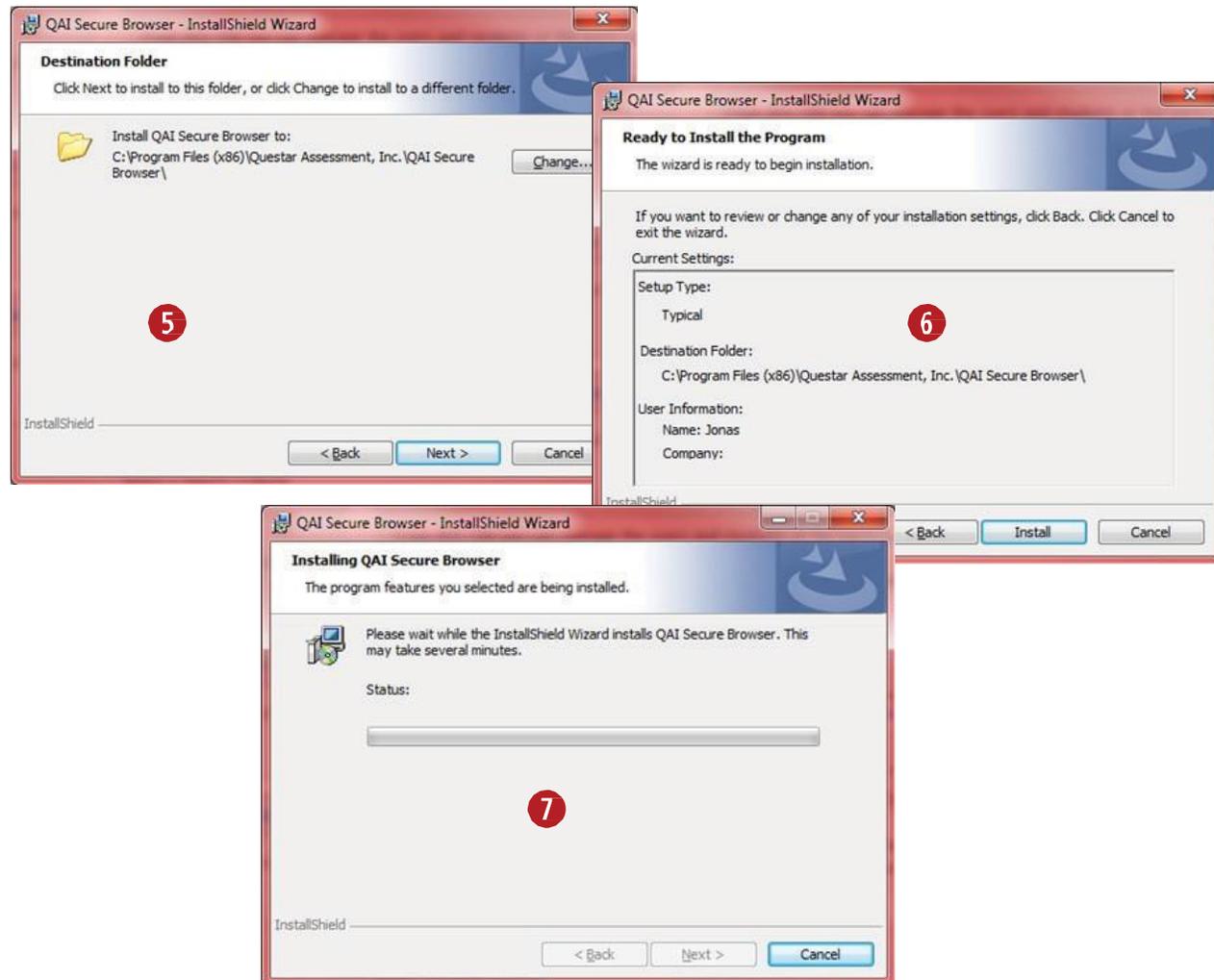
Additional resources and manuals can be found by clicking [Help Tab](#) above.

If you need assistance using the Administration Center site or the testing application, please contact Questar by calling 866-644-6648 or via email at SDcustomersupport@questarai.com.

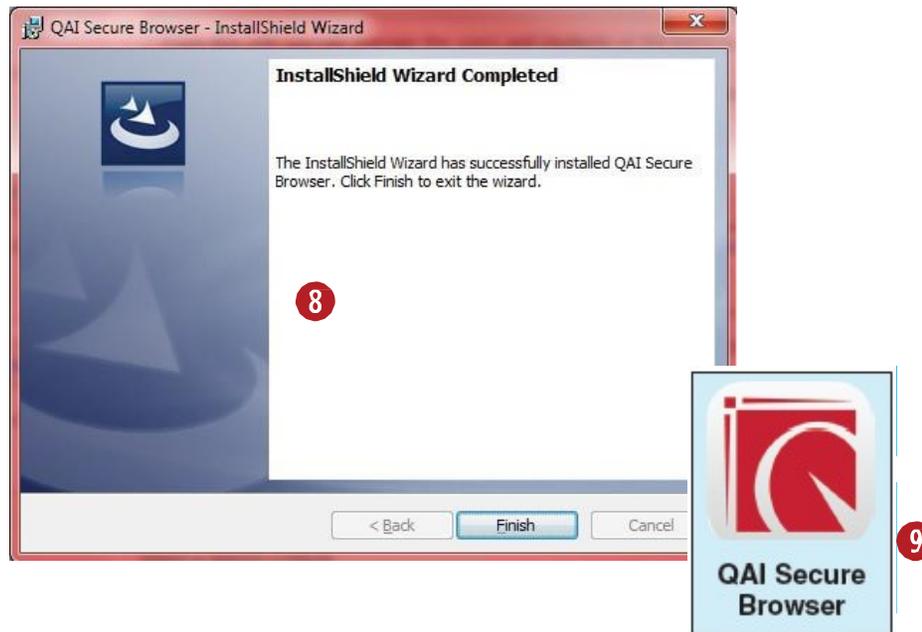


Preparing for Testing

1. Start a browser. Navigate to the following URL: <https://sddstep.questarai.com/admin/>
2. Log in to *DSTEP* Admin Site with the Username and Password that have been provided. If you did not receive a Username and Password, contact Questar's South Dakota Customer support by phone at 866-644-6648 or email at SDcustomersupport@questarai.com.
3. Click the **Windows QAI Secure Browser** link on the *DSTEP* Admin home page to install the QAI Secure Browser.
4. Wait for the file to download, then open/run it to launch the Installation Wizard.



5. Click Next and this popup appears.
6. Click Next or, if the location of the file needs to be changed, click Change. This popup box appears when clicking "Next."
7. Click Install. This popup box appears.



8. Click Finish, when the files complete loading.
9. Ensure the QAI Secure Browser shortcut is on the desktop.
10. Once installation is complete, follow the instructions in the “Verifying Setup” section on page 18.

Performing Push Installation – Windows Installer

Installation Commands for Windows Installer 3.0

The following examples illustrate how to install the Questar secure browser using command-line options with Windows Installer (msiexec.exe). These commands are useful when performing push installations to multiple devices using software deployment tools such as Microsoft System Center Configuration Manager or similar product.

Silent install

msiexec /i /qn c:\QAI_Secure_Browser.msi (where c:\ represents current location of the msi file)

Silent install to a specified directory

Note: The default directory is used in this example. Modify the location as needed for your site.

```
msiexec /i /qn c:\QAI_Secure_Browser.msi INSTALLDIR="C:\Program Files (x86)\Questar Assessment\Questar Secure Browser SDDSTEP\"
```

Configure Cache Folder for Each User or Computer

When using shared computers or a common login account, it's important that each student have a unique cache location for storing encrypted responses. This location can be local to the machine or a network file location. To create individually unique locations on shared computers, you can use the following run time command line switch:

- 1) Right click on the Questar Secure Browser, and choose Properties
- 2) Update the Target field by adding the following switch:
--cache-path="%allusersprofile%\Questar Secure Browser%\%username%\cachefolder"
- 3) Click OK

Please note that users must have Full Control access rights to this cache location, even if they belong to the Local Administrators group. A Windows Group Policy Object (GPO) can be used to establish these rights and distribute the modified shortcut to all computers as required.

Desktops/Laptops – Mac

DTC Important Information [Edit](#)

Please refer to the Help tab for:

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- DSTEP-A Data Collection form and Rating forms

IMPORTANT DATES

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Administration Center [Edit](#)

IMPORTANT: Confirm you are always working in the correct administration. In the upper right hand corner:

- Select "DSTEP Science" to print logins and access reports for the Science assessment.
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Operating System	Secure Browser
Windows 7+	QAI Secure Browser
Windows XP and Vista	QAI Secure Browser
Mac OS 10.9+ 3	QAI Secure Browser
Mac OS 10.6 - 10.8	QAI Secure Browser
Android	QAI Secure Browser
iPad app	Questar app
Chromebook Kiosk App	Chromebook Client

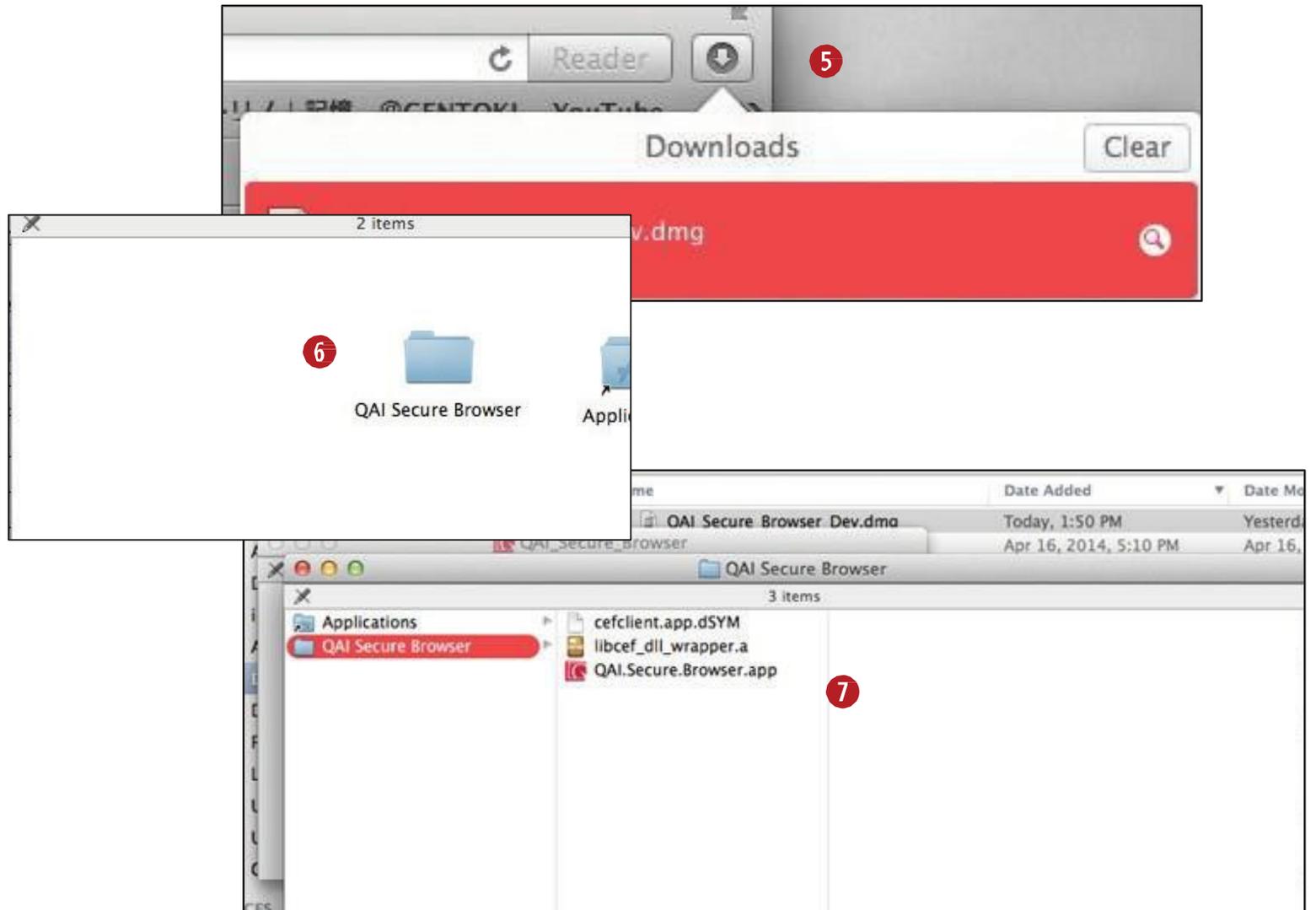
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If you need assistance using the Administration Center site or the testing application, please contact Questar by calling 866-644-6648 or via email at SDcustomersupport@questarai.com

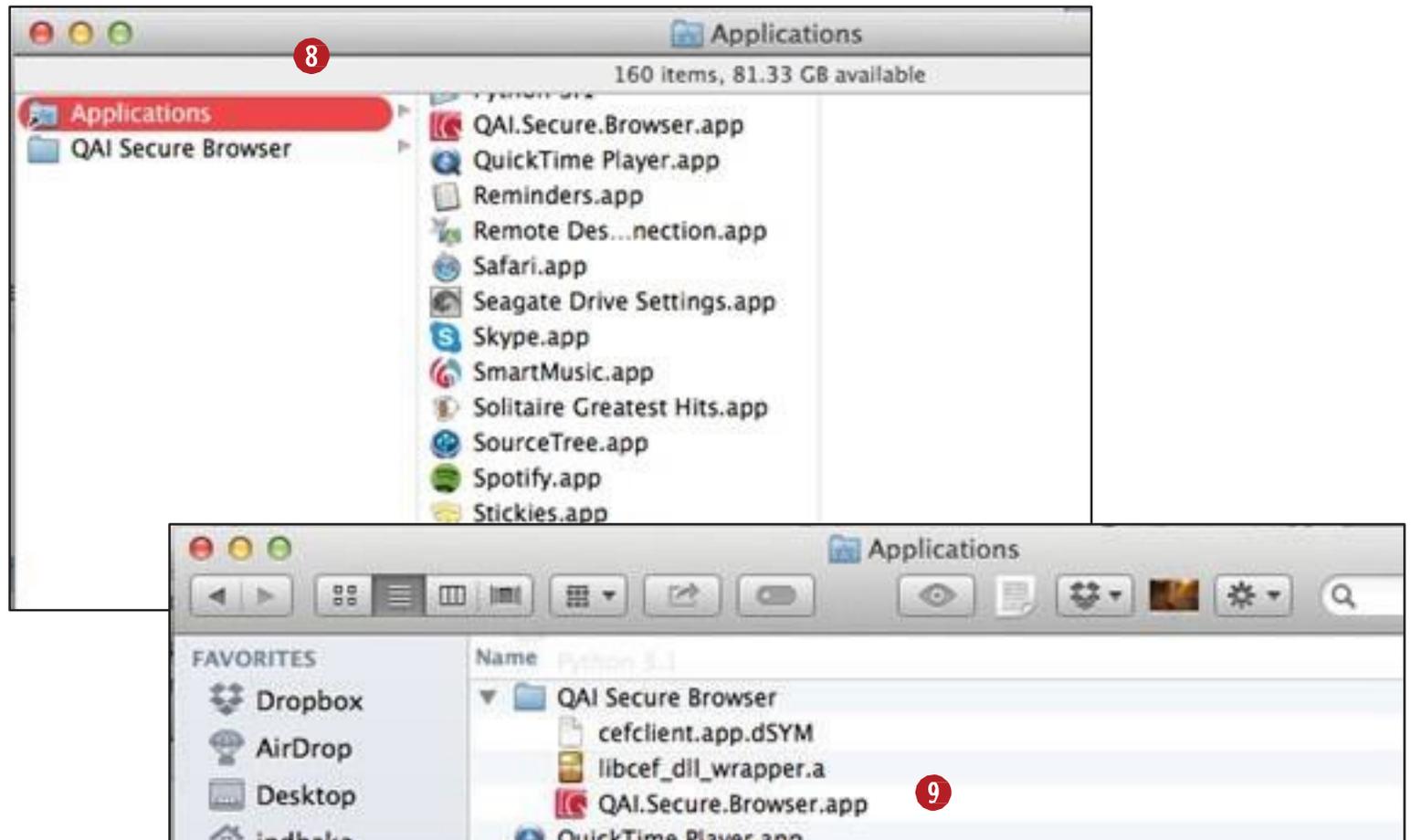


Preparing for Testing

1. Start a browser. Navigate to the following URL: <https://sddstep.questarai.com/admin/>
2. Log in to *DSTEP* Admin with the Username and Password that have been provided. If you did not receive a Username and Password, contact Questar's South Dakota Customer Support by phone at 866-644-6648 or email at: SDcustomersupport@questarai.com
3. Click the **QAI Secure Browser** link that corresponds to the operating system in use on the *DSTEP* Admin home page to install the QAI Secure Browser.
4. The download starts, and the progress bar appears in the upper right corner of the browser.



5. Click the down arrow in the upper right corner of the browser after the download is complete.
6. Click the **QAI_Secure_Browser.dmg** link to open this window.
7. Open the QAI Secure Browser folder.



8. Click and drag the QAI.Secure.Browser.app to the Applications folder.
9. Click and drag the QAI.Secure.Browser.app to the desktop and/or drag the icon to the desktop tray.
10. Once installation is complete, follow the instructions in the “Verifying Setup” section on page 18.

Android Tablets

DTC Checklist [Edit](#)

IMPORTANT DATES

- DTC/STC Online Admin Training #1: February 5, 2014 at 9:00-10:00am ET
- DTC/STC Online Admin Training #2: February 6, 2014 at 3:00-4:00pm ET
- Load Pre-ID File beginning February 7, 2014
- Testing Window: February 18, 2014-March 14, 2014

IMPORTANT REMINDERS

- Attendance to one of the two Online Admin Trainings is mandatory.
- Review the Online Test Coordinator's Manual posted to the Help Tab.
- Pre-ID files must be submitted one week prior to testing.

STC Checklist [Edit](#)

IMPORTANT DATES

- DTC/STC Online Admin Training #1: February 5, 2014 at 9:00-10:00am ET
- DTC/STC Online Admin Training #2: February 6, 2014 at 3:00-4:00pm ET
- Load Pre-ID File beginning February 7, 2014
- Testing Window: February 18, 2014-March 14, 2014

Welcome to the Questar Field Test Administration System [Edit](#)
[Edit Login Page](#)

Thank you for participating in the Questar Field Test administration. From this site you can upload your Pre-ID file and print student logins and passwords.

For information on how to prepare and load your school's Pre-ID file, please refer to the Pre-ID File Format Template and Quick Reference Guide located on the Help tab.

If you were not able to attend one of the two trainings, please view the recorded training available on the Help tab before proceeding.

If you have any questions please contact Questar Customer Service at 1-866-997-0695 or by email at Fieldtest@questarai.com.

Before administering the operational test to students, please take the Student Practice Test (also referred to as Tutorial or Practice Session) to learn more about the student testing system. The username is (ccrt) and the password is (tutorial). Please see the Directions for Administration Manuals for more detailed information regarding the Practice Test.

The links below launch the installation of the secured browser. One link is for Windows based workstations and the other is for Apple/Mac based workstations. Refer to the Questar Workstation Readiness Guide for more information about workstation preparation.

- [Questar Workstation Readiness Guide](#)

Operating System	QAI Secure Browser
Windows	QAI Secure Browser
Mac	QAI Secure Browser
Linux	QAI Secure Browser
Android	QAI Secure Browser

Preparing for Testing

1. Start a browser. Navigate to the following URL: <https://sddstep.questarai.com/admin/>
2. Log in to *DSTEP* Admin with the Username and Password that have been provided. If you did not receive a Username and Password, contact Questar's South Dakota Customer Support by phone at 866-644-6648 or email at: SDcustomersupport@questarai.com
3. On your Android tablet, click the **QAI Secure Browser** in the Admin next to the Android icon.
4. Tab or select the [Install] button.
5. The mobile secure browser will download and install onto your Android tablet. Look for the



Once installation is complete, follow the instructions in the "Verifying Setup" section on page 18.

iPads

Preparing for Testing

Please ensure the following steps have been completed:

- Disable Speech to Text (SIRI) by going to “General > Siri > **Off** on the device.
When prompted, select “Turn Off”. This will not affect any accessibility or accommodation.

Setting up iPads using Apple Configurator or a Mobile Device Manager (MDM)

All iPads should be setup in **Supervision** mode.

- Download and install the free Questar Application for Students iPad app from the iTunes store (pictured to the right).
- Deploy **Guided Access/Single App** mode with the following settings:
- Hardware Buttons > Always **OFF**
- Touch > **ON**
- Motion > **OFF** (All iPads must be locked in Landscape mode)



If Apple Configurator and/or an MDM is not available:

- Download and install the free Questar Application for Students iPad app from the iTunes store.
- Enable Guided Access/Single App mode by going to Settings > General > Accessibility > Guided Access.
- Triple-click the Home button to bring up the Guided Access/Single App feature.
- With the iPad displaying in Landscape mode, set the following parameters:
- Hardware Buttons > Always **OFF**
- Touch > **ON**
- Motion > **OFF** (this will lock further operation in landscape mode)
- Select **Start** to enter Guided Access/Single App mode.

Note: iPads should be 100% charged or plugged into a wall socket during the test. It is necessary to activate Guided Access within the app. If a student attempts to log in to the test and guided access is not activated, the system will not allow the test to start.

iPad2 Guided Access – If your students are using the Apple iPad2 without Guided Access turned on, you may receive a message telling you to turn on Guided Access to login to the test. Due to a known issue introduced by Apple, when you turn Guided Access on, it may not allow students to select their responses in the test. If you encounter this issue, it will be resolved by resetting all of the device settings. This can be done by going to the device Settings, selecting General, and then selecting Reset All Settings.

Once installation is complete, follow the instructions in the “Verifying Setup” section on page 18.

Chromebooks

Chromebooks

There are two options available to setup Chromebooks: Questar's Chrome Kiosk app and Chrome Enterprise User Accounts.

Questar Chrome Kiosk App

Questar's Chrome app is kiosk-enabled so it can be run in a variety of secure modes for student assessment/testing. Using the Chrome management console, administrators can push the app to Chrome devices in several ways thus allowing the app to be run in two primary modes: 1) as a Single App Kiosk Mode app or 2) as a Single App Kiosk Mode app with Auto-Login to Kiosk App. Both of these modes allow the student to begin testing while preventing access to other apps or their account.

The app for this assessment program can be obtained from the following URL:

<https://chrome.google.com/webstore/detail/questar-sddstep/doojcadhfhmgkiadbomdjdpljipodlko>

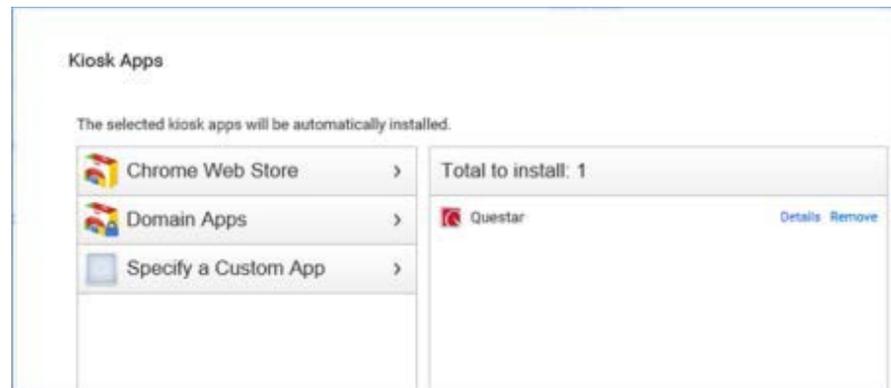
Please note this app has not been published to the Google Play store although the URL is publicly available. Therefore it should be kept confidential to prevent students or others from obtaining it.

Managing Kiosk Applications

Before delivering the app, administrators must configure the app under the Kiosk Apps section within the Device Management -> Chrome -> Device Settings menu. Select the Manage Kiosk Applications option -> Chrome Web Store option.

Search on "Questar" or "doojcadhfhmgkiadbomdjdpljipodlko."

Select the Questar application that appears.



Delivery Modes

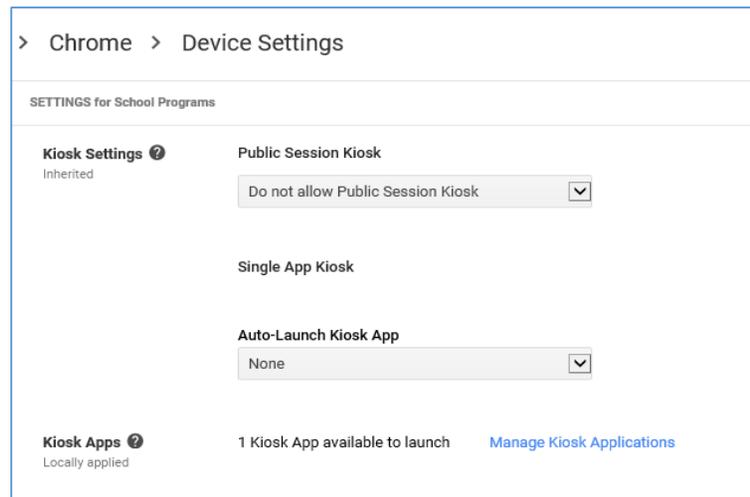
The following sections briefly describe the two primary delivery methods for the Questar Chrome app.

Single App Kiosk Mode

To deliver the app in Single App Kiosk Mode, administrators must first add the app to the Device Settings profile as shown above for each organizational unit (OU) where they want to deliver the app. In this example, we show “School Programs” as our organizational unit. Depending on your OU structure, you may want to move devices between OUs to dynamically deliver the app to testing centers or student devices. Also note the “Locally applied” text indicating these device settings are applied directly to this OU.

If the app is applied at the highest OU, all lower OUs will automatically inherit the app. If you want to limit the distribution of the app, then you need to apply different settings to distribute the app only to the desired OUs.

Note: It may take a period of time for the application to appear on the actual Chromebook. It depends on how often the Chromebooks are set to link back to the organizational entity for updates.



In this delivery mode, students are able to launch the app from the Apps menu on the system tray, which is located in the lower left-hand area of the login screen. No additional account login is required to launch the app. Upon launch, the app appears in kiosk mode (full screen), where the students are then required to log into the assessment with the unique usernames and passwords in order to access the assessment content.

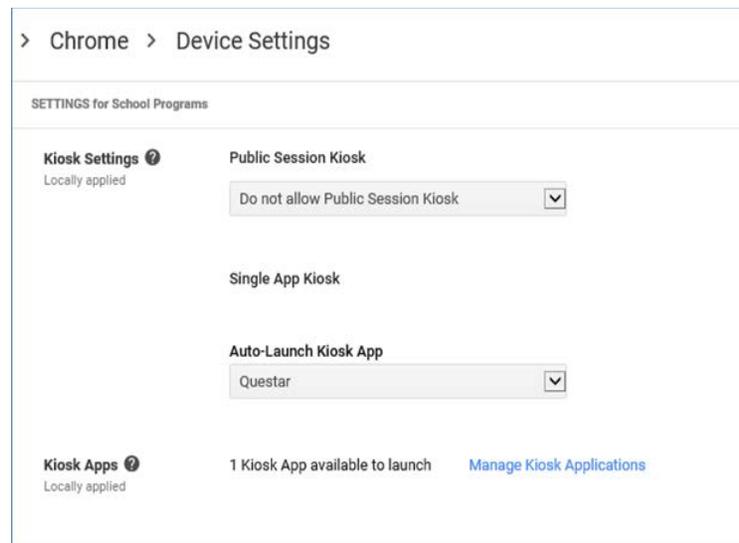
Single App Kiosk Mode – Non-managed Chrome devices

Non-managed Chrome devices, those without the Google Admin or Chrome management console, may also be configured to run Single App Kiosk Mode once the app has been manually installed on the device. If you are using a non-managed device, follow the steps below:

1. Open a new tab in Chrome, and enter **chrome://extensions** in the address bar. Click Enter.
2. Check the box next to Developer Mode.
3. Click Add kiosk application, and enter the ID of the Kiosk App you'd like to enable.
4. Press Enter.
5. The installed Kiosk App will now show up in the tray under Apps for a user to open from the tray.

Single App Kiosk Mode with Auto-Login

The second delivery method is configured the same as above with the exception being that the app is selected under Auto-Launch Kiosk App. In this configuration, the device will automatically launch the app when powered on thus preventing the login screen from appearing. While the device is booting up, administrators (and students) may press the keyboard shortcut **Ctrl+Alt+S** to escape out of this boot up sequence, returning the device to the login screen. This deployment method is better suited for testing centers where shared devices are used. *Please note that this deployment method is not supported for unmanaged Chrome devices.*



Questar Chrome Enterprise User Account Accounts

An alternate method of setting up the Chromebooks is to request an enterprise user account for each Chromebook to be used for testing. You **MUST** request the enterprise user accounts 5 days ahead of testing and install prior to the student testing start date. ITCs need to add a unique Chromebook secure account to each Chromebook that will be used for testing. The account only needs to be requested once per Chromebook and can be used for the duration of the year. *Note: Device accounts must be requested from Questar at least two weeks prior to the test window. If additional accounts are needed, please contact Questar Customer Support*

1. Add the enterprise user account provided by Questar, using the steps below:
2. Sign in to the school's Admin console used to manage the students' Chromebooks.
3. Go to Chrome Management > Device Settings and select the organizational unit the students' devices are in.
4. Under Sign-in Restriction, enter “*@questarai.net” and “*@questarai.com” to restrict sign-in to a list of users. This will restrict those who can sign in to the device as only belonging to the assessment domain.
5. Log the Chromebook in to the Google Secure Device account.
6. Once set up, the Chromebook is unable to navigate to any websites or applications other than the student web client. If you can perform any of these actions, the Chromebook is improperly secured.
7. Enter CTRL+ALT+E to display the enterprise login screen.

Setup is complete. The student can now login and take a test.

About Managed Chromebooks

Managed Chromebooks are set up and maintained by the school. If there is a managed icon in the status area in the lower right-hand side of the screen when signed into the Chromebook, the device is managed.

Managed Chromebooks will have sign-in restrictions enabled. The administrator settings may apply to the Chromebook even when signed in to a personal Google Account. If students are using managed Chromebooks, the Chromebook administrator will need to authorize the secure domain.

1. As the Chromebook administrator, log into the Chrome OS management console.
2. Click the Settings tab.
3. Click the Device Settings tab and scroll down to the Sign-in Restriction section.
4. In the text box, enter the following text: *@questarai.net, *@questarai.com
5. Press Enter.

Preparing Chromebooks

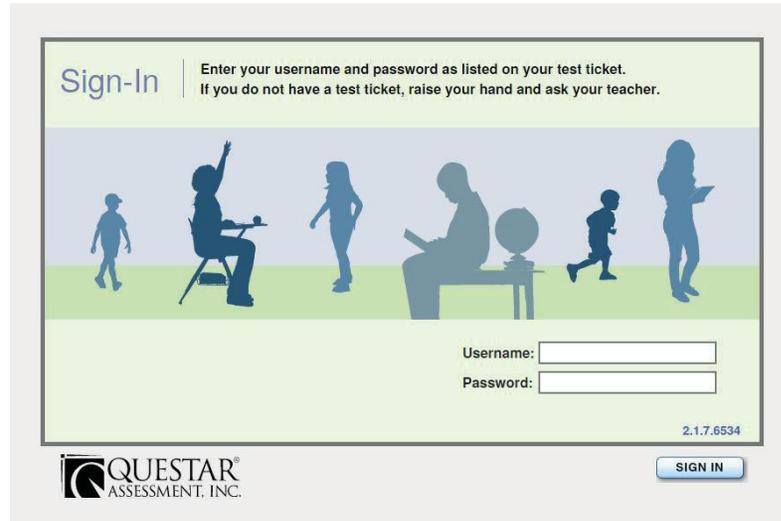
Please ensure the following steps have been completed:

1. Chromebooks are 100% charged or plugged into a wall socket during the test.
2. Start the Chrome browser. In doing so, the Questar Assessment System login screen will be automatically displayed.

Note: For Enterprise user accounts, when the test administration window is closed, under User Data, select “Erase all local user data” to erase the student’s data from the device. This is not recommended until after all testing is complete, as once the student data is deleted, any responses that did not transmit to Questar for any reason cannot be recovered, and the student will have to take the assessment again.

Verifying Setup (for all platforms)

- Open the QAI Secure Browser, and the DSTEP Web Testing Client displays.



- The Workstation Readiness Test is the same as a practice test. There is one practice test for each grade in the DSTEP program. Any one of the tests can be used to validate a workstation. Log in with the information below:

Grade 5:

Username: SDDSTEP05 (not case sensitive)

Password: practice (case sensitive)

Grade 8:

Username: SDDSTEP08 (not case sensitive)

Password: practice (case sensitive)

Grade 11:

Username: SDDSTEP11 (not case sensitive)

Password: practice (case sensitive)

- If it takes more than 30 seconds for the practice test to load, close the browser and try again.
- If the problem persists, contact Questar's South Dakota Customer Support by phone at 866-644-6648, or by email at SDcustomersupport@questarai.com.
- Read and follow the instructions on the screen for one question per type of sample item in the Workstation Readiness Test. Confirm all buttons and tools function correctly. For example, the highlighter tool should highlight text and the zoom button should enlarge the screen.
- Setup is now complete. The student uses the QAI Secure Browser to access the login page and take the test.

Workstation Lockout Applications

- If you have any scripts or applications, such as DeepFreeze™ or CleanSlate™, that clear out student profiles, the local profile needs to be set to “not purged” when the workstation is rebooted or logged out. This will help to reduce/eliminate possible issues if there are connection issues while testing, or if the student pauses a test and returns to finish at a later point.

Troubleshooting Tips

IMPORTANT: Please have the following information available prior to reporting an issue:

- Which test account(s) is having the issue?
- What OS is running on the computer?
- What time did the issue occur (if possible)?
- How many incidences occurred?
- Did the school run the Workstation Readiness (WSR) test prior to the start of testing?

Issues during installation of the secure browser

- Ensure the account logged on to the computer has proper administrator access to install the program.
- Ensure antivirus software is temporarily turned off if exhibiting issues during installation.
- If the problem persists, write down the error messages and/or take a screenshot of the error.
- Contact Customer Support to have Questar technical support remote-diagnose the issue.

Issues during Workstation Readiness (WSR)

- Minimum DSL connectivity requirement is 1,500 Kbits/sec.
- Wireless network capacity and coverage should also be taken into consideration.

- Ensure both the firewall and content filter (if applicable for the district) have *.questarai.com and *questarai.net entered as a whitelist, as well as the IP address 173.213.225.107, if possible.
- If possible, try running the WSR test outside of the firewall to verify there is no access issue with Questar and the problem is local due to LAN settings.
- If the problem persists, write down the error messages and/or take a screenshot of the error, record the OS type, and contact customer support to have Questar technical support remote-diagnose the issue:
 - Phone: 866-644-6648 from 7:00 AM – 5:00 PM CT outside of the test window, and from 7:00 AM – 7:00 PM during the test window.
 - Email: SDcustomersupport@questarai.com

Appendix A: Minimum System Requirements

Operating System	OS Version	Processor	System Memory/ Hard Disk Space	Screen Size Resolution	LAN Network	Internet Speed
Windows	XP/Vista/7/8/ 2003/2008 (latest service pack) (NOTE: Windows 8 RT is not supported)	Intel Pentium 4 1.0 GHz equivalent or higher CPU Recommended Intel Core 2 Duo 1.6 Ghz equivalent or higher performing CPU or higher performing CPU	Minimum 256MB Free Ram Recommended 512 MB Free Ram / Minimum 1 GB Free Storage Space	Minimum 10" class screen size (10" class is 9.5 to 10.5 inches) Minimum 1024 X 768 screen resolution Recommended 12" or larger screen size	Minimum 100 Mbps LAN/802.11g Wireless 54 Mbps or greater Minimum available LAN bandwidth at each workstation: 1 Mbps Recommended 1 Gbps LAN/802.11n Wireless 150 Mbps or higher Recommended available LAN bandwidth at each workstation 2 Mbps	Minimum per device: 150 kps Recommended: 300 kps A secure browser will be used.
Mac	10.6/10.7/ 10.8/10.9/10.10	Intel Core 2 Duo 1.6 GHz equivalent or higher performing CPU / Minimum 1 GB Free Storage Space	Minimum 256MB Free Ram Recommended 512 MB Free Ram / Minimum 1 GB Free Storage Space	Minimum 10" class screen size (10" class is 9.5 to 10.5 inches) Minimum 1024 X 768 screen resolution Recommended 12" or larger screen size	Minimum 100 Mbps LAN/802.11g Wireless 54 Mbps or greater Minimum available LAN bandwidth at each workstation: 1 Mbps Recommended 1 Gbps LAN/802.11n Wireless 150 Mbps or higher Recommended available LAN bandwidth at each workstation 2 Mbps	Minimum per device: 150 kps Recommended: 300 kps A secure browser will be used.

Operating System	OS Version	Processor	System Memory/ Hard Disk Space	Screen Size Resolution	LAN Network	Internet Speed
Android Tablets	4.2, 4.3, 4.4 for the following supported devices: <ul style="list-style-type: none">• Google Nexus 10• Samsung Galaxy Tab 2 (10.1)• Samsung Galaxy Note (10.1)• Motorola Xoom• Motorola Xyboard	1.0 Ghz dual core equivalent or higher	Minimum 256MB Free Ram Recommended 512 MB Free Ram / Minimum 256MB Free Storage Space	Minimum 10" class screen size (10" class is 9.5 to 10.5 inches) Minimum 1024 X 768 screen resolution	Minimum Wireless 54 Mbps or greater Minimum available LAN bandwidth at each workstation: 1 Mbps Recommended 802.11n Wireless 150 Mbps or higher Recommended available LAN bandwidth at each workstation 2 Mbps	Minimum per device: 150 kps Recommended: 300kps A secure app will be used.
iPad 2 or higher	iOS 7 or higher	1.0 Ghz dual core equivalent or higher	Minimum 256MB Free Ram Recommended 512 MB Free Ram / Minimum 256MB Free Storage Space	Minimum 10" class screen size (10" class is 9.5 to 10.5 inches) Minimum 1024 X 768 screen resolution	Minimum Wireless 54 Mbps or greater Minimum available LAN bandwidth at each workstation: 1 Mbps Recommended 802.11n Wireless 150 Mbps or higher Recommended available LAN bandwidth at each workstation 2 Mbps	Minimum per device: 150 kps Recommended: 300kps A secure app will be used.
Chrome OS Chromebooks	Versions 29 through 40 (NOTE: Chrome OS manages and controls the upgrade process. We will review and confirm upgrades as they are released.)	1.6 Ghz equivalent or higher	Minimum 256MB Free Ram Recommended 512 MB Free Ram / Minimum 256MB Free Storage Space	Minimum 10" class screen size (10" class is 9.5 to 10.5 inches) Minimum 1024 X 768 screen resolution	Minimum Wireless 54 Mbps or greater Minimum available LAN bandwidth at each workstation: 1 Mbps Recommended 802.11n Wireless 150 Mbps or higher Recommended available LAN bandwidth at each workstation 2 Mbps	Minimum per device: 150 kps Recommended: 300 kps A secure app will be used. will be used.

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