

Technology User Guide WIDA

Data Recognition Corporation (DRC) 13490 Bass Lake Road Maple Grove, MN 55311

Direct: 1-855-787-9615

Website: https://www.wida-ams.us Email: wida@datarecognitioncorp.com Revision Date: September 6, 2018

COPYRIGHT

Copyright © 2018 Data Recognition Corporation

The following items in DRC INSIGHT are protected by copyright law:

- · The User Guide.
- All text and titles on the software's entry and display, including the look and feel of the interaction of the windows, supporting menus, pop-up windows, and layout.

DRC INSIGHT Online Learning System is trademarked by Data Recognition Corporation.

Any individuals or corporations who violate these copyrights and trademarks will be prosecuted under both criminal and civil laws, and any resulting products will be required to be withdrawn from the marketplace.

The following are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries:

Internet Explorer Microsoft Windows Windows Vista Windows XP Windows 7 Windows 8 Windows 10

The following are trademarks or registered trademarks of Apple Corporation in the United States and/or other countries:

Apple Macintosh Mac OS X and macOS iPad iOS*

*iOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under license.

Safari

The following are trademarks or registered trademarks of Google Corporation in the United States and/or other countries.

Android Chrome Chromebook Google Play

The following is a trademark or registered trademark of Mozilla Corporation in the United States and/or other countries.

Firefox

Linux is a registered trademark of Linus Torvalds. Ubuntu and Canonical are registered trademarks of Canonical Ltd. Gnome is a trademark of the Gnome Foundation.

Volume I: Introduction to Online Testing

■ Introduction	About This Guide	13
	Audience and Prerequisites	13
	Important Information	
	DRC INSIGHT Online Learning System Overview	
	INSIGHT Web Browser and INSIGHT Server	
	INSIGHT Portal Page	
	System Readiness Check	
	The WIDA Assessment Management System	
	(WIDA AMS)	15
	Testing Site Manager (TSM)	
	Content and Response Caching	
	TSM Diagnostic Tools	
	Test Practice	
	Test Demos.	
	Testing Accommodations	17
	Voice Capture Response	
	INSIGHT, the TSM, Computers/Devices, and Testing Programs	
	Software Installation and Update Rights	17
■ System Requirements and Testing information	What's Covered in This Section. WIDA Configuration Information. System Requirements Information. Automatic Software Updates. Network Requirements for Testing Computers. Network Connectivity. Wireless Networking. Desktop Monitoring. INSIGHT Bandwidth and Connectivity Requirements. INSIGHT and Virtual or Remote Desktops. Kiosk Mode and Security. Windows 7 Desktop Font Size Requirements. Windows 7 Taskbar Security Requirement. Testing and the Windows 10 Game Bar. Enabling the Microphone on an iPad. Keyboard Note Regarding iPad Devices. MacBook Trackpad/Mousepad Settings.	19 20 22 23 24 25 25 25 25 30 34
	Manually Adjusting the Timeout Settings on a Mac Computer	
■ Clossom		
■ Glossary	Glossary	43

Volume II: Testing Site Manager (TSM)

■ Introduction	About This Guide	48
	Testing Site Manager (TSM)	48
	Benefits and Features	48
	TSM Overview	49
	Content and Response Caching	49
	TSM Diagnostic Tools	49
	Test Practice	49
■ TSM System	What's Covered in This Section	
Requirements	TSM Installation and the Number of Students Testing	
and Testing	Tablet Devices and the TSM	
	Software Installation and Update Rights	
Information	TSM System Requirements Information	52
■ TSM	What's Covered in This Section	
Windows	Installing a TSM	
Installation	Installing Multiple TSMs and INSIGHT	
mstanation	Quick Tour: Installing a TSM for Windows OS	
	Managing the TSM	
	Installing a TSM from the Command Line	
	Starting and Stopping the TSM	
	Uninstalling the TSM	60
■ TSM Mac (OS X	What's Covered in This Section	
and macOS)	Installing a TSM	
Installation	Installing Multiple TSMs and INSIGHT	
mstanation	Quick Tour: Installing a TSM for Mac OS X and macOS	
	Managing the TSM	
	Starting and Stopping the TSM	
	Uninstalling the TSM	66
■ TSM Linux	What's Covered in This Section	68
	Installing a TSM	
Installation	Installing Multiple TSMs and INSIGHT	
	Installing 32-bit Java Libraries	
	Quick Tour: Installing a TSM for Linux	70
	Managing the TSM	
	Starting and Stopping the TSM from the Terminal	75
	Starting and Stopping the TSM Using the	
	Boot-Up Manager Software	
	Uninstalling the TSM	76

Volume II: Testing Site Manager (TSM)

■ Working with the TSM

What's Covered in This Section	78
Testing Site Manager Tools	78
Using the TSM	79
Using Content Caching	82
Content Caching	
Response Caching—Viewing Unsent Student Test Responses	
Response Caching—Viewing Historical Test Responses	90
Ping Activity	
Graphing Ping Activity	
Load Simulation Testing	
Performing a Load Simulation	
Analyzing Load Simulation Results	102
Viewing Historical Simulation Data	
Load Balancing the TSM	107
Prerequisites	
Registering a TSM for Load Balancing	
Updating the TSM Clock Time	
Resetting the Time on a Windows 7 TSM Computer	
Resetting the Time on a Mac (OS X and macOS) TSM Com	puter 114

Volume III: Configuring Devices for Testing

■ Introduction

- The COS -Device Toolkit Dashboard
- Configuring Devices For Testing

About This Guide	117
COS - Device Toolkit Overview	117
Central Office Services Software	118
COS Icon	118
Introduction	120
Navigating the COS - Device Toolkit Dashboard	121
Overview of Configuring INSIGHT	129
Web Browsers and the COS - Device Toolkit	129
COS - Device Toolkit Deployment Files and Silent Installation	129
Setting Up INSIGHT on PCs, Mac, and Linux Testing Devices	131
Setting Up INSIGHT on iPad Testing Devices	131
Setting Up INSIGHT on Chromebook Testing Devices	132
Configuring and Installing INSIGHT with a TSM	133
TSM Considerations	
Installing Multiple TSMs and INSIGHT	134
Starting the COS - Device Toolkit and Displaying a Configuration	
Creating Configurations	138
Working with Configuration Information	142
Working with Locations	143
Working with Content Management	146
Working with Content Hosting	147
Working with Service Devices	148
Creating Configuration Files for Multiple Testing Programs	149
Deployment Files, Configurations, and the TSM	150
Creating Deployment Files for Testing Devices	151
Working with Testing Devices	153
Moving, Removing, and Reloading Testing Devices	154
Moving Testing Devices between Districts and/or Schools	156
Adding Testing Devices by Device ID	160
Viewing Testing Device Log Files	161
Deleting Configurations	162

Volume IV: DRC INSIGHT

■ Introduction	About This Guide	165
- introduction	DRC INSIGHT	165
■ Windows	What's Covered in This Section	167
	Installing Multiple TSMs and INSIGHT	
Installation	Quick Tour: Installing INSIGHT for Windows OS	
	Managing INSIGHT	
	Installing INSIGHT from a Command Line	
	Installation Command Syntax and Example	
	Installing INSIGHT Silently	
	Installing INSIGHT Silently Using ORCA	
	Starting INSIGHT	
	Stopping INSIGHT in Windows 7	177
	Stopping INSIGHT in Windows 10	
	Uninstalling INSIGHT	
	Using the Control Panel	
	Using the Start Menu	
	Using a Command	
■ Mac (OS X	What's Covered in This Section	180
and macOS)	Installing Multiple TSMs and INSIGHT	
•	Quick Tour: Installing INSIGHT for Mac OS X and macOS	
Installation	Managing INSIGHT	
	Installing INSIGHT Using a Software Deployment Tool	186
	Starting INSIGHT	188
	Stopping INSIGHT	188
	Uninstalling INSIGHT	188
	Using the Applications Folder	188
■ Linux	What's Covered in This Section	190
Installation	Installing Multiple TSMs and INSIGHT	190
installation	Installing 32-bit Java Libraries	
	Installing the Gnome Desktop Environment	192
	Quick Tour: Installing INSIGHT for Linux	
	Managing INSIGHT	
	Installing INSIGHT Using the Terminal	198
	Installing INSIGHT from a Command Line	199
	Installation Command Syntax and Example	199
	Uninstalling INSIGHT Using the Synaptic Package Manager	199
	Uninstalling INSIGHT Manually	202

Volume IV: DRC INSIGHT

	Installing	
	INSIGHT on	
	iPad Devices	

■ Installing INSIGHT on Chromebook Devices

■ The System Readiness Check

What's Covered in This Section	204
DRC INSIGHT and the Apple App Store	204
Distributing and Registering INSIGHT	
iPads, the TSM, and INSIGHT	
Multiple Testing Programs	
Preparing the iPad for Testing	
Viewing the DRC INSIGHT Configuration on an iPad	
What's Covered in This Section.	
Setting Up INSIGHT on Chromebook Devices	
INSIGHT Deployment Overview	
INSIGHT Installation Overview	
Chromebook Devices, the TSM, and INSIGHT	212
Multiple Testing Programs	212
Example of Chromebook Device Setup	
and Configuration for INSIGHT	213
Quick Tour: Installing INSIGHT for Chrome	
Using the System Readiness Check on a Chromebook	220
What's Covered in This Section	222
Starting the System Readiness Check	222
Using the System Readiness Check	223
The System Readiness Required Tests	228
Resolving System Readiness Required Tests	229
Issue 1. Screen Resolution Error	
Issue 2. Internet Connectivity Error	
Issue 3. RAM Error	229
Issue 4. Audio Capability Error	
Issue 5. OS Level Error	229
Issue 6. User Agent Error	230
Issue 7. TSM Connection Error	230
Issue 8. TSM Response Caching Error	
Issue 9. TSM Version Error	
Issue 10. Client Version Error	231
Testing Audio	232
Troubleshooting Audio	235

Volume IV: DRC INSIGHT

_			4.5	
	Intro	MIII	CtI/	n
	IIILI O	uu	CIIC	,,,

■ Working with INSIGHT

■ FAQs, Hints and Tips

About This Guide	242
What's Covered in This Section.	244
Test Practice	245
The Monitor Setting Verification Test	
Changing the Monitor's Contrast or Brightness	247
The Capacity Estimator	248
Using the Capacity Estimator	249
What's Covered in This Section.	254
General Questions	255
Common Technical Questions and Answers	258
Question: How do I update test forms in a TSM?	258
Question: Can we mass deploy DRC INSIGHT to	
all student computers?	259
Capacity Estimator Questions	
Load Simulation Testing Questions	265
iPad Questions	267
Chromebook Questions	268
General Hints and Tips	272
iPad Hints and Tips	272
Chromebook Hints and Tips	273
Google/Chromebook Plug-In Error	274

■ Error Messages

What's Covered in This Section	276
Message: A Communication System Error has Occurred	277
Message: Chromium OS version xxxx.xx.x is not	
supported by DRC INSIGHT	277
Message: Configuration Error	
Message: Configuration Not Found	278
Message: Connection Error Retrieving Content	278
Message: Could Not Retrieve Testing Information	278
Message: Device Registration	279
Message: Download of Upgrade Failed	279
Message: Failed to Load Device Information	
Message: Guided Access is Not Enabled	280
Message: Internet Connection Error	280
Message: No TSM Configured	280
Message: Operating System version is not	
supported by DRC INSIGHT	280
Message: Registration Failed	281
Message: Session Ended	281
Message: Session Inactive. Please raise your hand and	
wait for help.	281
Message: Session Status Outside Window	281
Message: Test Exit! Response Stored on TSM	282
Message: Test Version Error	282
Message: Test Version Error	282
Message: The device's operating system has been updated and	
is in the process of being certified by DRC.	282
Message: TSM Connection Error Could Not Register TSM	283
Message: TSM Connection Error During Login	283
Message: TSM Connection Error Responses May Be Stored	283
Message: TSM Connection Error Retrieving Content	284
Message: TSM Content Caching Configuration Error	284
Message: TSM Content Caching Error	284
Message: TSM Version Error	285
Message: Your Client Attempted To Access An Invalid URL	285
Message: Your Client Failed The Readiness Check	285
Message: Your Client Is Out of Date	
Message: Your Client Is Out Of Date	
Message: Your Device Has Not Been Registered	286

Volume I: Introduction to Online Testing

■ About This Guide

Audience and Prerequisites

Important Information

DRC INSIGHT
 Online
 Learning
 System
 Overview

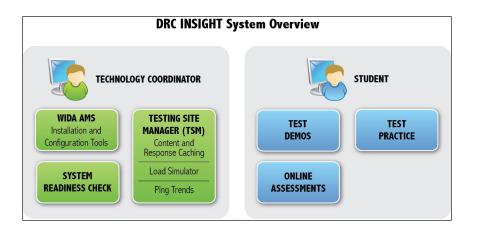
This user guide is part of a multi-volume set that describes how to configure, install, manage, and troubleshoot the DRC INSIGHT Online Learning System, or DRC INSIGHT. DRC INSIGHT is a secure, Web-based, online interface. This volume, *Volume I: Introduction to Online Testing*, introduces the components that make up the DRC INSIGHT Online Learning System; references configuration, installation, network, and system requirement information; and provides state-specific testing information as well as a glossary of common online testing terms.

All of the volumes in this guide are designed primarily for the Technology Coordinators (TCs) who are responsible for setting up and managing online testing and ensuring their systems work effectively and securely. TCs should be knowledgeable about the technical details of the various operating systems and have the necessary security privileges to perform the tasks discussed in this guide.

This guide is also designed to help District Test Coordinators (DTCs), School Test Coordinators (STCs), and Test Administrators (TAs) use DRC INSIGHT more effectively. It provides help with configuration and installation, helps answer some common questions, and provides troubleshooting tips.

! Important: Throughout this user guide, the Information icon **!** indicates important information or crucial tips.

DRC INSIGHT works with various software and hardware components to provide a secure, proven online testing system that successfully delivers statewide assessments. DRC INSIGHT delivers assessments and related resources online for all content areas and grade levels by incorporating computerized testing, related resources, dynamic reporting, and a suite of tools. It works with the Testing Site Manager (TSM) to help manage network traffic, maintain connectivity, and handle bandwidth issues.

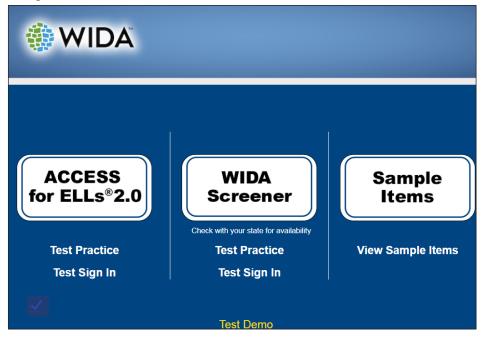


INSIGHT Web Browser and INSIGHT Server

INSIGHT Portal Page

The main component of DRC INSIGHT is the secure Web-browser testing interface software installed on each testing device. This software communicates with the DRC INSIGHT server to provide Test Practice and test questions to the test taker and to send responses to the DRC INSIGHT server, which stores them securely. Throughout this user guide, we refer to the secure Web-browser interface as simply INSIGHT.

The image below shows the portal page that appears for WIDA when you start INSIGHT. This page contains links to tests, Test Practice, and Sample Items.



! Important: This volume of the INSIGHT user guide, *Volume I: Introduction to Online Testing*, displays the actual images that a WIDA testing client will see. Throughout the other volumes in this user guide set, generic, non-WIDA-specific images are used to highlight information.

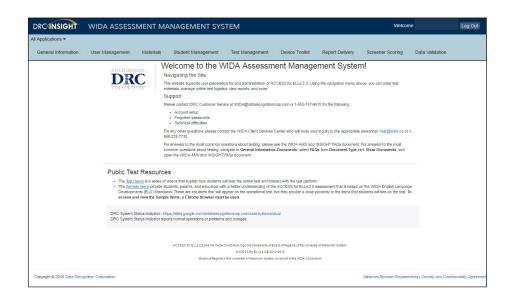
System Readiness Check

The System Readiness Check runs when INSIGHT is installed or starts, or when you click the check mark at the bottom left of the INSIGHT Portal Page. It runs a series of tests that help you verify whether the testing device is configured correctly and ready for testing.

The WIDA Assessment Management System (WIDA AMS) The WIDA Assessment Management System (WIDA AMS) provides distribution and administrative functions for the DRC INSIGHT Online Learning System.

- Technical users download INSIGHT, the TSM, and other software and links from WIDA AMS to set up their testing environment.
- Administrative users use WIDA AMS to create student records and test sessions to help manage or monitor their testing environment and report the results.

WIDA AMS details are covered in the WIDA Assessment Management System (WIDA AMS) User Guide.



Testing Site Manager (TSM)

INSIGHT also provides the Testing Site Manager (TSM), a powerful, web-based application that provides content caching and a software toolbox to help you plan, configure, and manage your online testing environment. Usually, you install the TSM caching software on one or more strategic computers with sufficient bandwidth to help manage and streamline communication between the test devices and the DRC INSIGHT server.

!Important: The TSM is strongly recommended for WIDA testing.

Content and Response Caching

The TSM offers two types of caching—content caching for test content and response caching for students' Writing test responses. At test time, the TSM content caching software sends its cached test items to the testing devices. This content must be current in order for students to test.

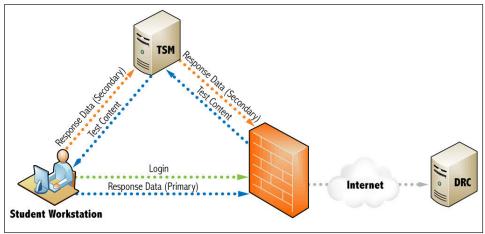


Figure: TSM Content Caching

! Important: DRC strongly recommends content caching for WIDA testing to handle the large amount of data required to transmit the items to the student during testing. Response caching is optional and only applies to the Writing domain (shown in the diagram as the Response Data (Secondary) path through the TSM).

In addition to content and response caching, the TSM offers powerful diagnostic software tools, including Load Simulation Tests and Ping Trend Graphs, to help sites prepare and manage their test environment.

DRC INSIGHT's Test Practice allows students and administrators to become familiar with the online test environment and the suite of online testing tools. You should install INSIGHT on the testing computers as early as possible in the testing cycle to give students time to familiarize themselves with the INSIGHT test environment and the testing tools before they test.

TSM Diagnostic Tools

Test Practice

Test Demos

Testing Accommodations

Voice Capture Response

■ INSIGHT, the TSM, Computers/ Devices, and Testing Programs

■ Software Installation and Update Rights

DRC offers test demos to help students become familiar with all aspects of online testing. Students can access the test demos from the Test Demo link on the INSIGHT portal page.

DRC INSIGHT also offers many accommodations, including optional audio testing accommodations, to help students test successfully.

Voice Capture Response (VCR) test items are designed for the WIDA speaking tests. These items allow a student to listen to a test question using a headset and record a spoken response. Later, handscoring teams listen to the recorded test responses and score them.

You can install a TSM and INSIGHT on a computer, and configure INSIGHT to support one or more testing programs.

- You can install a TSM on a Windows, Mac, or Linux computer, but you can only install one TSM per computer. To use the TSM with two different testing programs (for example, ACCESS for ELLs 2.0 and your state-specific testing program), you must install two TSMs, one for each program on separate computers (or uninstall the first program's TSM and install the second TSM on the same computer).
- You can install INSIGHT on a Windows, Mac, or Linux computer, or on a Chromebook, or iPad device. From that single computer or device, you can use INSIGHT to access multiple testing programs. When you start INSIGHT, a page lists the different testing programs from which you can select.
- You can install a TSM and INSIGHT on the same Windows, Mac, or Linux computer.
- You can install INSIGHT on a Windows, Mac, or Linux computer and configure it to work with a TSM that is installed on a different Windows, Mac, or Linux computer.
- You can install INSIGHT on a Chromebook, or iPad device, and configure it to work with a TSM that is installed on a Windows, Mac, or Linux computer.

Certain software rights are required to install and/or automatically update INSIGHT and the TSM software. INSIGHT requires Administrator rights to install it and Write access to perform the software Auto Update function. The TSM software requires Administrator rights to install it and to perform the software Auto Update function.

System Requirements and **Testing Information**

What's Covered in This Section

This section contains a link to the specific hardware, software, network, and desktop requirements to configure INSIGHT, the Testing Site Manager (TSM), and automatic software updates.

■ WIDA Configuration Information

This section also discusses tasks that Technology Coordinators (TCs) perform to configure the INSIGHT software environment. TCs must configure INSIGHT to use with TSM systems and to connect directly to the DRC servers and databases through the Internet.

This user guide includes information about the operating systems, software, devices, and accommodations that work with INSIGHT and the TSM.

The specific technical information covered in this user guide that pertains to WIDA is shown below. Use this information as reference throughout this user guide.

Operating Systems

Windows

Mac (OS X and macOS)

Linux

Apple iOS

Chrome OS

TSM and Other Options

Content Caching

Response Caching

Capacity Estimator

Load Simulation Testing

Load Balancer Registration

Ping Trends

System Requirements Information

The DRC system requirements information describes the specific hardware, software, network, and desktop requirements to configure INSIGHT and the TSM to work with various testing devices in different testing scenarios. This information is updated quarterly based on various factors, including changes in vendor support of various operating systems and hardware devices.

To review the current information, see the Supported System Requirements for ACCESS for ELLs 2.0 and Screener.

System Requirements and Testing Information

Automatic Software Updates

For online testing, both the INSIGHT software and the TSM software must be up to date. You can perform this task manually or automatically. You can use the System Readiness Check to confirm that you have the latest version of the INSIGHT and/or TSM software (see *Using the System Readiness Check* in Volume IV: DRC INSIGHT).

Operating Software Updates

Operating system updates are different than INSIGHT software updates and TSM software updates. On testing days, testing devices should not be set to automatically update the operating system because this can interfere with testing.

(!) Important: Operating system vendors such as Google, Microsoft, and Apple are moving to a model where operating system updates occur automatically in the background. Update processes running in the background on testing devices consume CPU and memory, and can affect the testing experience—audio playback may be choppy and Speaking test responses may be distorted.

To avoid this situation, verify that no background processes are running on testing devices during testing. Also, if a testing device is set to accept operating system updates automatically, verify that it has the most current version of the operating system before the test session starts.

INSIGHT Software Updates

To specify that the INSIGHT software automatically updates the testing devices, use the Central Office Services - Device Toolkit to select **Enable Auto Update** during the configuration process (see *Volume III: Configuring Devices for Testing*).

- If the Automatic Update feature is enabled, the software checks the version each time INSIGHT is launched, and provides the option to install any software updates.
- If the Automatic Update feature is not enabled, the software also checks the version when INSIGHT starts
 - When a student attempts to log in to a test, the student is notified that they do not have the latest version of the software and cannot continue.
 - You must update the software manually by downloading the latest version from WIDA AMS and reinstalling.

Update your software *before* testing begins to avoid delays.

① Important: INSIGHT requires Administrator rights to install and Write access to the installation folder to perform the Automatic Update function.

TSM Software Updates

For a TSM machine, you can specify whether to have TSM software updates performed automatically or to be notified when updates are available and install them manually.

(1) Important: The TSM software requires Administrator rights to install and to perform automatic updates.

When you install a TSM, on the Automatic Update window you specify whether to enable notification of TSM software updates.

- If you select **Enable Automatic Update** (the default value), DRC updates the TSM software automatically.
- If you select **Disable Automatic Update**, DRC notifies you whenever an update to the TSM software is available and you must update the TSM software manually. A software update message is displayed on the main TSM page.

① Important: On the day of testing, confirm that the TSM software is up to date to ensure that students can test. For example, if the machine where the TSM is installed was turned off recently, it is possible that the TSM software is out of date.

Network Requirements for Testing Computers

This section describes various network considerations for online testing.

Network Connectivity

To ensure proper network connectivity for testing, keep the following information in mind.

- All testing computers should have access to the Internet and be able to access the DRC servers using HTTP/HTTPS protocols on ports 80 and 443.
- All firewalls at the testing computer and the network level should allow connectivity on ports 80 and 443.
- Whitelist the following file types, both internally and externally:
 - enc exe (for updates) msi (for updates) gif html jar jpeg json xml
- Prioritize and whitelist INSIGHT traffic on firewalls, Internet packet shapers, routers, switches, proxies, and other network devices you use.
- Each testing program uses its own URLs to communicate from the INSIGHT client (workstation) software to DRC servers, or from the TSM server to DRC servers. Whitelist the URLs shown in the table below on the content filtering systems or other proxy/firewall software that you use locally.

Program	URLs	Port/Protocol
WIDA	https://drc-centraloffice.com	80/http; 443/https (applies
	https://wida-insight-client.drcedirect.com	to all of the URLs)
	https://drc-wbte-prod.s3.amazonaws.com	
	https://wida-insight.drcedirect.com	
	https://wida.drcedirect.com	
	https://wbte.drcedirect.com	
	https://www.wida-ams.us	
	https://dtk.drcedirect.com	
	https://api-gateway-cloud.drcedirect.com	
	https://api-gateway.drcedirect.com	
	https://cdn-content-prod.drcedirect.com	
	https://cdn-download-prod.drcedirect.com	

Notes:

- When whitelisting, you can whitelist *.drcedirect.com if your filter allows wildcard addresses.
 - **Note:** DRC recommends that you whitelist *.drcedirect.com if possible. Some locations may have to whitelist both the individual address and the wildcard address.
- Besides whitelisting these sites, you may need to allow sites to pass through the proxy server without requiring authentication credentials to be passed by INSIGHT.
- DRC recommends allowing INSIGHT traffic to bypass your firewalls and proxies if possible.
- If your location uses an Internet connection idle timeout, please verify that the timeout limit is sufficient to allow students to complete testing. Usually, a minimum of two hours is required.
- If your location uses screensavers, please verify that the timeout limit is sufficient to allow students to complete testing.

Wireless Networking

INSIGHT supports wireless networks. However, sites may experience issues on less reliable wireless networks or if too many students attempt to connect to a single access point. When you test load capacity in a wireless network, verify that your access points and network can handle the number of simultaneous users that will be testing. DRC recommends performing load testing in a wireless network (see *Load Simulation Testing in Volume II: Testing Site Manager [TSM]*).

① Important: Some access points interpret TSM-to-INSIGHT communication as peer-to-peer networking. If you have Layer 7 or peer-to-peer web filtering rules in your filters and access points, DRC recommends that you disable them. Also, some content filters have advanced settings to allow for additional checks. If your content filter has Reverse Lookup or Evasive Protocols, DRC recommends that those be disabled as part of the filtering process.

Desktop Monitoring

If your testing location uses remote desktop monitoring software to monitor the computers that will be used for testing, that software may interfere with the testing software.

! Important: If possible, disable the monitoring software on testing computers during test times to guarantee adequate security. The particular steps you need to take vary, depending on the monitoring software you are using and the operating system of the testing computer. If it is not feasible to disable your monitoring software, ensure that any staff members who can use the monitoring software refrain from using it during testing periods.

System Requirements and **Testing Information**

INSIGHT Bandwidth and Connectivity Requirements

To start a test, INSIGHT contacts DRC to log in. After a successful login, INSIGHT downloads the test from the DRC server (or the TSM if content caching is available). INSIGHT sends answers to DRC every time the page is changed (or to the TSM if communication with DRC is interrupted*).

- INSIGHT must maintain connectivity to the Internet throughout the test (or a TSM if response caching is available).
- INSIGHT supports wireless networks. If you test using wireless networks, be careful not to overload the network access points.
- DRC recommends Ethernet networks where available for online testing.
- *If a testing computer cannot communicate with DRC, the student cannot log on to start a test.

Bandwidth Calculation Guidelines

Bandwidth requirements and recommendations are based on the *actual amount of bandwidth available*. Even with a high-speed communication line, only part of the connection may be available for online testing due to Internet traffic. The greatest amount of bandwidth is required when students download tests.

Calculating Bandwidths

You can estimate bandwidth requirements by dividing the size of the test by your target wait time (the amount of time it should take the test to load).

Note: ACCESS for ELLs and WIDA Screener tests contain audio files. These files make the test size larger and the download time longer.

Bandwidth Required with a TSM

With a TSM, many more students can load the test at a time. A TSM decreases your Internet bandwidth requirements because you can load the test from the TSM rather than from the DRC server, which greatly increases your capacity.

(!) **Important:** Bandwidth calculations are estimates. There are many variables, including network traffic, that can impact actual network performance. For more information about bandwidth calculations, see *The Capacity Estimator* in *Volume V: Troubleshooting*.

INSIGHT and Virtual or Remote Desktops

INSIGHT is a desktop-installed application that runs natively (natively meaning without external support as opposed to running in an emulation) on specific operating systems. To successfully launch and run INSIGHT, you must meet system requirements, such as operating system level, processor, disk space, memory, Internet connectivity, and screen resolution.

(!) Important: If your virtual/remote machines meet these system requirements, INSIGHT can run in a virtual or remote desktop environment. However, because WIDA testing has audio accommodations embedded in the content, districts should not use a virtual environment for INSIGHT. It can cause the audio to skip and interfere with the testing experience.

Kiosk Mode and Security

When INSIGHT runs on a supported device and operating system, its uses Kiosk Mode to "lock down" student access and prevent students from performing inappropriate testing activities, such as accessing the Internet. INSIGHT's Kiosk Mode is not available for virtual/remote operating systems and devices. Sites using virtual computing technology and devices must implement security measures to ensure that any virtual or remote desktops a student is using cannot access other applications while online assessments are being administered.

Native Operating Systems and Devices

To review the supported operating systems on which INSIGHT runs natively, as well as the devices that can currently run INSIGHT-supported operating systems natively if they meet the minimum system requirements, see the Supported System Requirements for ACCESS for ELLs 2.0 and Screener.

System Requirements and Testing Information

Virtual Desktop Operating Systems

Besides the physical devices that host operating systems directly, virtual desktops can indirectly host some supported operating systems for INSIGHT. Typically, users access these virtual desktops from another operating system, on another device, across a network boundary. The following table lists the supported and unsupported operating systems for virtual or remote desktop sessions.

Supported Operating Systems	Unsupported Operating Systems
Microsoft Windows	Google Chrome OS
• Mac (OS X and macOS)	Apple iOS
• Linux	Google Android
nComputing vSpace	

Virtual Desktop Devices

The device a student interacts with is actually a gateway to the virtual or remote desktop. However, the device may or may not be capable of supporting INSIGHT natively or be able to run an operating system that INSIGHT supports. The following table lists the types of devices that can run the various operating systems that INSIGHT supports.

Supported Devices	Unsupported Devices*	
Desktop computers	Chromebooks	
• Laptops	• Tablets	
Netbooks/tablets	 Convertible devices and hybrid devices 	
• Servers	• Phones	
Wyse Thin Clients and Wyse Zero Clients	• iPods	
nComputing devices	Other UNIX devices	

^{*}Virtual and remote desktop software can access supported operating systems. If you test using unsupported devices, ensure that students cannot access the Internet and other resources.

Windows 7 Desktop Font Size Requirements

The testing computers' font size settings must match the test settings to guarantee that line breaks and other items display correctly during testing. The following table shows the correct font size setting for testing and how to specify it for the Windows 7 operating system.

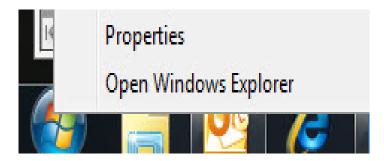
Operating System	Font Size Setting	How to Check or Change
Windows 7	100% (Custom DPI)	Select Control Panel—Appearance and Personalization—Display—Set custom text size (DPI). When you click Apply, your new font size setting will be used in your Windows programs.

Windows 7 Taskbar Security Requirement

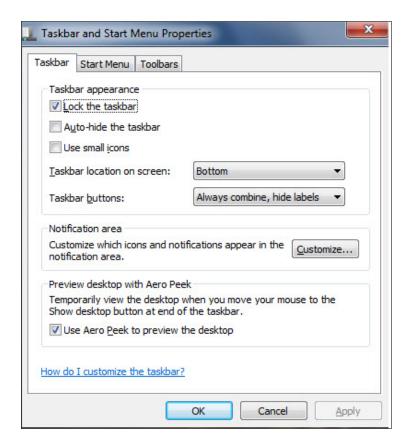
During testing, each testing computer is locked down while INSIGHT is active to prevent the student from having access to outside information. For Windows 7 computers, you must be sure the **Auto-hide the taskbar** setting is turned off to secure the testing computer.

To turn off the **Auto-hide the taskbar** setting on a Windows 7 computer, perform the following steps:

1. Right-click on the Windows logo on the taskbar and select **Properties**.



2. From the Taskbar tab on the Taskbar and Start Menu Properties dialog box, uncheck the **Auto-hide the taskbar** checkbox (if it is checked).



3. Click **Apply** to verify your change and **OK** to save it.

Online Testing, Testing Devices, Peripheral Devices, and Software Features

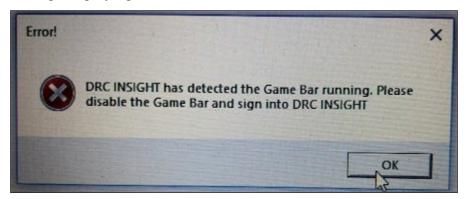
This topic discusses various configuration details related to testing devices, peripheral devices, and software features for online testing.

Peripheral/Feature	Device	Description	Reference
Game Bar	Windows 10	Sites must disable the Game Bar feature on Windows 10 devices before testing, either manually or by using group policy. DRC has confirmed that testers testing on Windows 10 computers can capture screen shots of test questions within INSIGHT if the Game	See "Testing and the Windows 10 Game Bar" on page 30
Cortana	Windows 10	Bar feature is active. For Windows 10 devices, Cortana must be disabled for testing, either manually or by using group policy.	See "Disabling Cortana in Windows 10 Devices" on page 33
Microphone	iPad	The first time sites launch INSIGHT on an iPad, they must enable the microphone even if they are not taking a speaking test.	See "Enabling the Microphone on an iPad" on page 34
Keyboard	Chrome (plus a note about iPads)	Before students start taking a Writing test using a Chrome device, the testing site must verify that the device's keyboard configurations are correct for online testing. Specifically, if students might use quotation marks ("") and/or apostrophes (') in test responses. Because some users may be prohibited from using these characters, DRC recommends configuring your device to use the US keyboard.	See "Keyboard Settings for Chrome Devices" on page 36 (for iPads, see the "Keyboard Note Regarding iPad Devices" that follows)
Trackpad/mousepad	MacBook	Before testing, sites must manually disable both Look up and Three finger drag/Gestures functionality. Look up allows users to tap a word with three fingers to display a definition of the word. Three finger drag/Gestures allows users to access multiple applications by swiping between two full-screen apps. This functionality is activated via the device's trackpad/mousepad. If it is enabled, students have the potential to access unauthorized information and/or applications during the online assessment.	See "MacBook Trackpad/ Mousepad Settings" on page 38
Timeout Settings	Mac (OS X and macOS)	For Mac (OS X and macOS) computers, it is important that various timeout settings are set to work with the INSIGHT timeout value to avoid timing out during testing.	See "Manually Adjusting the Timeout Settings on a Mac Computer" on page 39

Testing and the Windows 10 Game Bar

When INSIGHT is started on a Windows 10 machine, the software verifies whether the Game Bar feature is active. If the Game Bar is active, INSIGHT displays the message shown below.

To continue, the user must click OK, which closes the message and shuts down INSIGHT. To successfully launch INSIGHT and use it for testing, the Game Bar feature must be disabled (see "Disabling the Windows 10 Game Bar" on page 31). After the game bar feature is disabled, the user can launch INSIGHT and log in to it without the message displaying.



Background

DRC has confirmed that testers testing on Windows 10 computers can capture screen shots of test questions within INSIGHT if the Game Bar feature is active. If the Windows 10 Game Bar feature is active, testers can use it to specify that DRC INSIGHT is a game and to capture screen images of test questions within the INSIGHT test engine by performing the following steps:

- 1. Launch INSIGHT.
- 2. Press Windows-Alt-PrtScn. A text box appears allowing the user to mark DRC INSIGHT as a game.
- 3. Select Yes, this is a game.
- **4.** Continue the test and use the **Windows–Alt–PrtScn** key combination to take screen shots. The screen shots are saved to the Videos\Captures folder.

Disabling the Windows 10 Game Bar

Testing site personnel must disable the Game Bar feature on Windows 10 computers, prior to testing. There are multiple methods available to accomplish this task.

Method 1: Turn Off the Feature on Each Computer

The first method is to turn off the Windows 10 Game Bar on each computer on which it is active. There are two ways to accomplish this:

- Testing personnel can turn the feature off manually for all users of the computer (see "Turning Off the Game Bar Feature in Windows 10" on page 32).
- Administrators can use the Windows Local Group Policy Editor to edit the local policy for the computer and turn the feature off, either for all users, or for a group of users of the computer.
 - The Local Group Policy Editor is only available in the Windows 10 Pro, Enterprise, and Education editions.
 - A user must be signed in as an administrator to use the Local Group Policy Editor.
 - By default, policies set in the Local Group Policy Editor are applied to all users unless the administrator applies user policy settings for *administrators*, *specific users*, or *all users except administrators*.

For more information, refer to https://www.tenforums.com/tutorials/51180-enable-disable-game-dvr-game-bar-windows-10-a.html.

Method 2: Turn Off the Feature for a Group of Computers

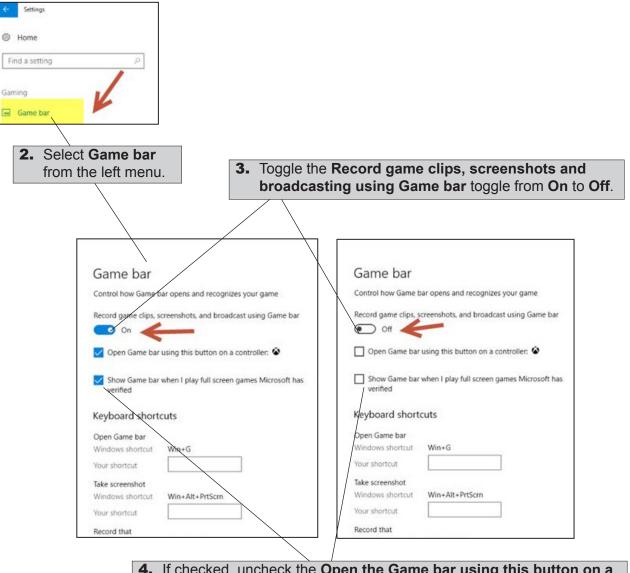
The second method is for site administrators to turn off the feature for a group of computers within a network domain by editing the Domain Group Policy which affects all of the computers in the domain. For more information about this method, refer to your Windows network policy documentation.

Turning Off the Game Bar Feature in Windows 10

Perform the following steps to turn off the Windows 10 Game Bar feature. You can reverse these steps after testing is complete to turn the Game Bar feature on again.

Process

1. Exit INSIGHT, open the **Settings** menu, and navigate to **Gaming**.



- 4. If checked, uncheck the Open the Game bar using this button on a controller checkbox and the Show Game bar when I play full-screen games Microsoft has verified checkbox.
- 5. Close the Settings menu. To verify your results, restart INSIGHT and press the Windows-Alt-PrtScn key combination. If the Game Bar feature is disabled, nothing should happen. Check the Videos\Captures folder to verify that no new screenshots exist.

Disabling Cortana in Windows 10 Devices

For Windows 10 devices, Cortana must be disabled for testing, either manually or by using group policy.

Disabling Cortana Manually

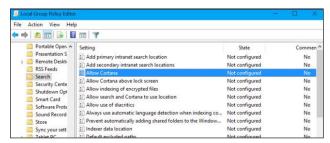
To disable Cortana manually on a Windows 10 device, do the following:

- 1. Launch Cortana from the Search bar on the Task bar.
- 2. From the left pane click **Settings**.
- 3. Under Cortana, toggle the switch to Off.

Disabling Cortana by Using Group Policy

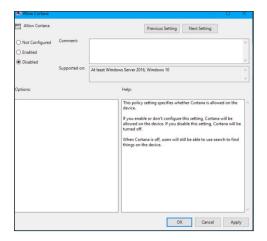
To disable Cortana using Group Policy on Windows 10 devices, do the following:

- 1. Type **gpedit.msc** in the Task bar search bar and press **Enter** to open the Local Group Policy Editor.
- 2. Navigate to Computer Configuration-Administrative Templates-Windows Components-Search.
- **3.** Double-click on **Allow Cortana** to open the Settings box.



The Allow Cortana group policy setting specifies whether Cortana is allowed on the device. If you enable or don't configure this setting, Cortana is allowed on the device. If you disable this setting, Cortana is turned off on the device.

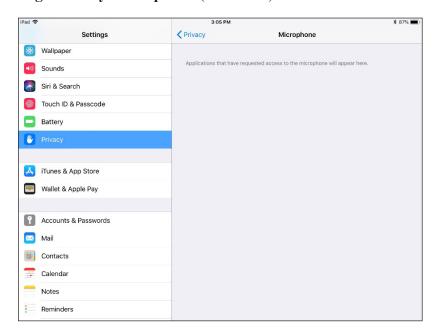
4. Set Allow Cortana to Disabled, click OK, and close the group policy editor.



5. Sign out and sign back in–or restart your PC–to make the change take effect.

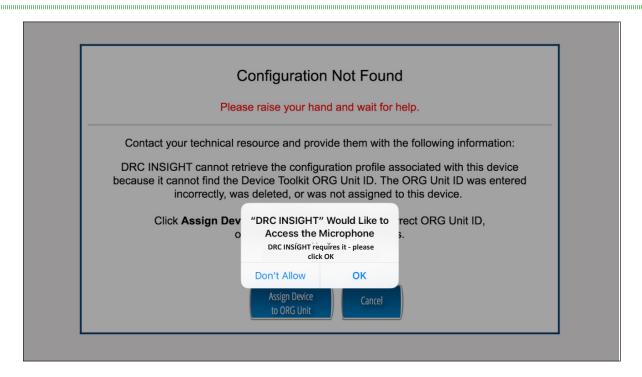
Enabling the Microphone on an iPad

Before INSIGHT is installed on an iPad, there is no microphone access setting under **Settings-Privacy-Microphone** (see below).



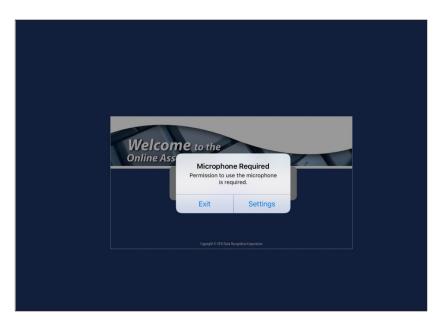
 After INSIGHT is installed, the first time it is launched a prompt displays to disallow/allow microphone access. Tap OK.

(!) Important: Even if the testing administration does not use a microphone or any speaking-response tests, the test administrator MUST tap **OK** to allow microphone access.

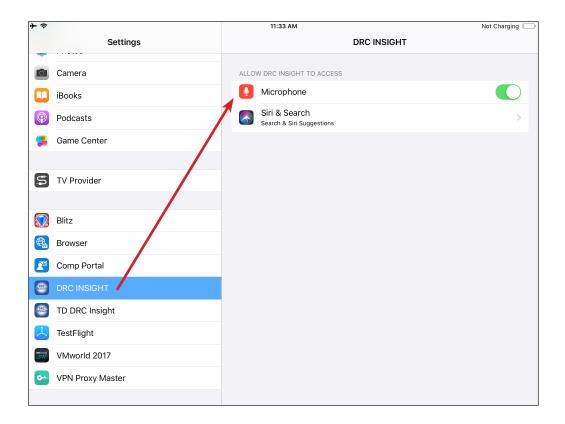


Enabling the Microphone on an iPad (cont.)

2. If the test administrator selects **Don't Allow** instead of **OK**, INSIGHT displays the following message and testing cannot continue.



3. If this happens, the test administrator must click **Settings**, manually enable the microphone for INSIGHT using the **DRC INSIGHT** slider (see below), and restart INSIGHT.



System Requirements and Testing Information

Keyboard Settings for Chrome Devices

Before students start taking a Writing test using a Chrome device, the testing site should verify that the device's keyboard configurations are correct for online testing. Specifically, if students might use quotation marks ("") and/or apostrophes (') in test responses, sites must verify that the testing device is configured correctly.

As background, both quotation marks and apostrophes are commonly used in Text-Dependent Analysis (TDA) responses where a student's response is based on a passage presented to the student and the student must provide evidence from the passage to support claims, opinions, and ideas. Some Chrome OS configurations may cause these characters to not display properly, or cause an error message to display.

(!) Important: INSIGHT does not adjust operating system settings, so these keyboard settings should be reviewed before testing begins.

Keyboard Note Regarding iPad Devices

For the INSIGHT iPad App, version 8.0 and higher, INSIGHT is automatically placed in Guided Access Mode regardless of whether Mobile Device Management (MDM) software is used to deploy the App.

When INSIGHT launches, the software prompts you to lock INSIGHT in Single App Mode and you should select Yes. When the iPad is locked in Single App Mode, the Smart Punctuation feature is turned off. Turning this feature off removes the issues discussed above concerning quotation marks ("") and/or apostrophes ('). For more details, refer to *Preparing the iPad for Testing* in *Volume IV: DRC INSIGHT*.

Chrome Keyboard Settings

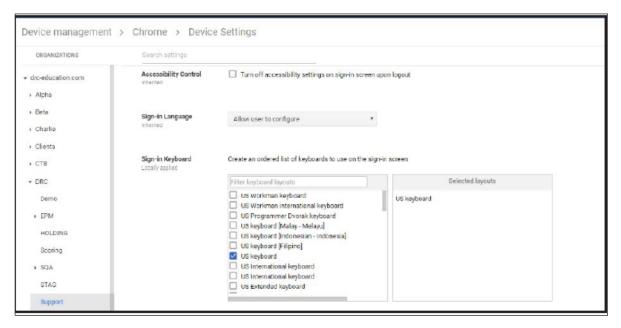
For Chrome OS devices, to ensure that quotation marks and apostrophes display properly in INSIGHT, the keyboard should be set to **US Keyboard**, the language should be set to **US English**.

Changing Chrome Keyboard Setting by Using Shortcuts

On the Chrome device, press **Ctrl–Shift–Spacebar** to toggle through the keyboard types configured on the device until **US** is displayed in the status area in the bottom-right of the desktop.

Changing Chrome Keyboard Setting by Using the Google Admin Console

Within the Google Admin Console, navigate to **Device management–Chrome–Device Settings** and select **US keyboard** (see the image below).



Changing the Chrome Keyboard Language Setting

If the language setting on a Chromebook keyboard is set to International English (vs. US English), it can cause the quotation marks button to become unavailable. Remove International English and add US English to the available languages

- 1. Sign on to the Chromebook and click the Status area.
- 2. Click Settings-Show advanced settings.
- 3. In the Languages section, click Language and input settings.
- 4. Select US English. If US English is not available, click Add, select US English, and click OK.
- 5. In the right column, click the US English box.
- 6. Click Done

Ensure that the Chromebook keyboard is set to US Standard —not US International.

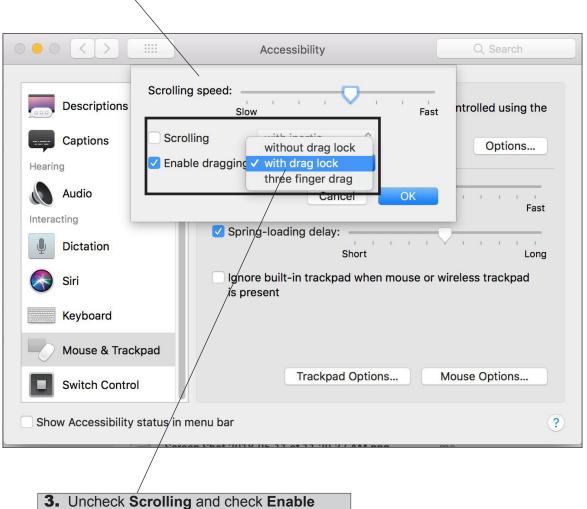
......

MacBook Trackpad/Mousepad Settings

On MacBook devices, OS X level 10.11 and later, sites must manually disable the **Scrolling** and **Enable dragging with drag lock** functionality. Scrolling allows users to tap a word with three fingers to display a definition of the word. Enabling dragging with drag lock prevents users from accessing multiple applications by swiping between two full-screen apps.

(!) Important: DRC strongly recommends that sites disable this functionality *before* online testing. If school technology personnel cannot disable the functionality without disrupting testing, sites must closely monitor sessions using MacBooks to watch for any use of this functionality.

- 1. To disable the Scrolling feature and enable the Dragging feature manually, use the Finder (or click on the Apple icon in the upper left-hand corner of the screen) and select **System Preferences...** to display the System Preferences page.
- 2. Select Accessibility-Mouse and Trackpad-Trackpad Options.



dragging. From the drop-down menu that displays, select **with drag lock**.

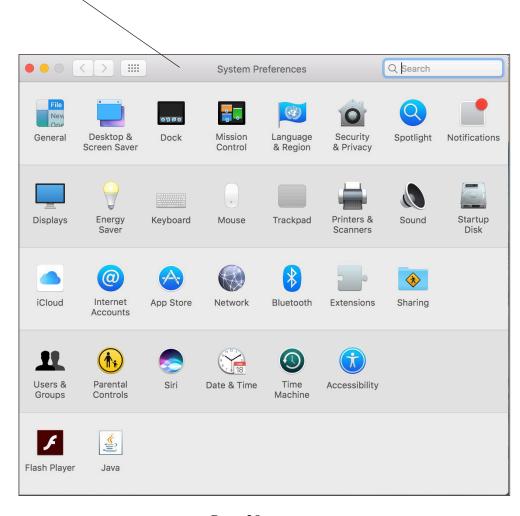
Manually Adjusting the Timeout Settings on a Mac Computer

Online testers that are using Mac (OS X and macOS) devices for testing must verify that the various computer timeout settings are set in combination to a value that works with the INSIGHT timeout value. DRC recommends that the combination of screen saver and energy-saving timeout settings on Mac testing devices should be greater than the INSIGHT timeout value.

(!) Important: For most DRC clients, INSIGHT is set to time out after twenty minutes of inactivity during a test session (a sixty-second countdown/warning displays before the timeout begins). Some clients have requested different timeout values for INSIGHT. Please verify with your site administrator if you are unsure which timeout value you are testing with. These instructions assume the standard value of twenty minutes.

On a Mac computer, the Mac administrator must verify that the three timeout settings for Security Privacy, Energy Saver, and Desktop & Screen Saver are set correctly. These timeout settings are adjusted from the System Preferences page.

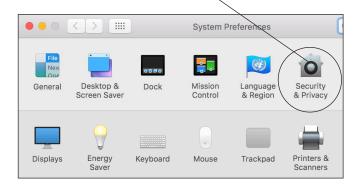
To display the System Preferences page, use the Finder (or click on the Apple icon in the upper left-hand corner of the screen) and select **System Preferences....**



Manually Adjusting the Timeout Settings on a Mac Computer (cont.)

On a Mac computer, the best way to prevent screen display timeout issues is to disable the Security Privacy setting **Require Password after sleep or screen saver begins during testing**. If this setting is disabled, the computer will not require a screen password during testing.

1. To disable the setting, select **Security & Privacy** from the System Preferences page.



2. Uncheck Require Password after sleep or screen saver begins.





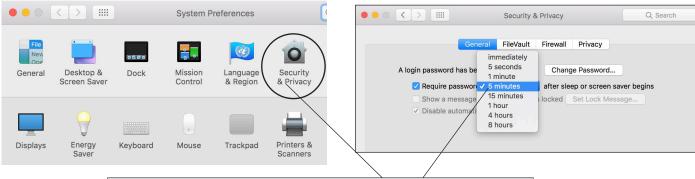
3. Click Turn Off Screen Lock.

Manually Adjusting the Timeout Settings on a Mac Computer (cont.)

If the **Require Password after sleep or screen saver begins** setting is not disabled during testing, the combined time for various timeout settings on the System Preferences page—Require Password X Minutes after sleep or screen saver begins, the Energy Saver settings for Computer sleep and Display sleep, and the Screen Saver start time—must total twenty minutes or more (based on the INSIGHT timeout setting).

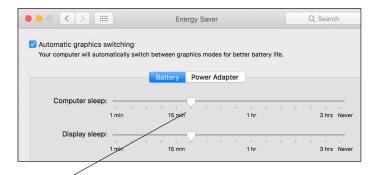
Example of Combining Timeout Settings

The example below shows how to combine timeout settings for testing with INSIGHT. With these settings, the testing computer will wait more than twenty minutes before requiring a password, fifteen minutes before sleeping, twenty minutes before starting the screen saver, and five minutes after going to sleep or starting the screen saver. Note that this is one example—other combinations of timeout settings also work well.



Set the Security & Privacy password to Require Password
 minutes after sleep or screen saver begins.

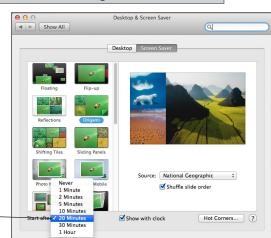




2. Set the Energy Saver screen slider settings for Computer sleep and Display sleep to a value of 15 minutes or greater.



3. Set the **Desktop & Screen Saver** setting to start the screen saver to **Start after 20 minutes**.



Glossary

Accommodation

■ Capacity Estimator

- Central Office Services -Device Toolkit
- Content Caching
- DRC INSIGHT Learning System
- DRC INSIGHT
- Dynamic IP Address

Modifications or enhancements made to tests, or test environments, that allow students with physical or learning disabilities, or a limited English-language ability, to more accurately demonstrate their knowledge and skills in an assessment situation.

An Excel spreadsheet file you can download and use to estimate the following testing times:

- The time it will take to initially download INSIGHT (the test engine) based on the number of students who test at the same time.
- The times a student will wait for both a fixed-form test and a Computer Adaptive Test (CAT) to load, with and without content caching configured. These times are plotted against the number of students who start testing at the same time.
- The time required for a student to receive the next fixed-form or CAT test question when the student is finished with a question (the time required for the testing device to save the test response and retrieve the next question).

DRC software that you use to configure the testing devices in your environment. You use the Central Office Services - Device Toolkit to organize, configure, and manage your devices for testing with DRC INSIGHT and the TSM.

The Testing Site Manager (TSM) can cache test content. At test time, the TSM content caching software sends its cached test items to the testing devices. This content must be up to date in order for students to test. DRC strongly recommends TSM content caching for maximum performance. The TSM is strongly recommended for WIDA testing.

DRC's system to deliver assessments and related resources online for all content areas and grade levels by incorporating computerized testing, related resources, dynamic reporting, and a suite of educator tools. The DRC INSIGHT Online Learning System consists of a secure web browser testing interface and the TSM to help manage network traffic, maintain connectivity, and handle bandwidth issues (see "Testing Site Manager").

The main component of the DRC INSIGHT Online Learning System, DRC INSIGHT is a secure Web-browser testing interface that is installed on each testing device. This software communicates with the DRC INSIGHT server to provide Test Practice and test questions to the test taker, and to send responses to the DRC INSIGHT server, which stores them securely.

An IP address that can change when the computer is restarted or rebooted based on the pool of IP addresses that are available at the time (see "Static IP Address").

Glossary

■ Emulation

Hardware or software that enables one computer system to behave like (or emulate) another computer system.

■ Kiosk Mode

When DRC INSIGHT runs on a supported device and operating system, it uses Kiosk Mode to "lock down" student access and prevent students from performing inappropriate testing activities, such as accessing the Internet.

■ Latency

The rate of data transfer across a network is referred to as latency. Knowing the latency of a network is useful for helping to determine peak network traffic times and for analyzing the best times for testing. For example, when the TSM "pings" the IP address of the DRC server, the network sends packets of data from the TSM to the DRC server and back. The network calculates the time, in milliseconds, it takes for the data to be received. The longer this time is, the longer it has taken the DRC server to receive the data packets (usually because of excess network traffic).

■ Load Simulation Test (LST)

A software test used to perform load simulations to help estimate the amount of time it will take to download tests and upload responses. For individual testing devices, a load simulation test reports the following:

- The source for the content: the TSM, DRC, or the client computer (based on the configuration)
- The amount of time it took to load the test to the testing device, on average
- The time it took to submit the result to DRC
- The combined time it took to load the test and submit the result

A device that can run INSIGHT-supported operating systems natively if it meets the minimum system requirements. Running natively means running without external support, as opposed to running in an emulation (see "Emulation").

Native Device

The TSM can cache student test responses. For WIDA testing, response caching is only applicable to the Writing domain. During writing testing, if the test devices cannot communicate with the DRC INSIGHT server, the TSM response caching software buffers and stores their test responses. When the response caching software is communicating with DRC, it sends test responses to the DRC INSIGHT server every fifteen minutes. Even if DRC is not currently communicating with the testing devices, the test responses are still being stored on the TSM for transmission to DRC, so no test responses are lost.

Response Caching

An IP address that is permanently assigned to a computer and does not change when the computer is restarted or rebooted (see "*Dynamic IP Address*").

Static IP Address

■ System Readiness Check

■ Test Engine

■ Test Practice

Testing Site Manager (TSM)

■ TSM Server Domain

■ Thin Client

■ Virtual Desktop

■ Virtual Desktop Device

■ Voice Capture Response (VCR) A software program that helps you troubleshoot issues that may occur when DRC INSIGHT is installed or running. This program is installed automatically with DRC INSIGHT, runs when DRC INSIGHT runs, and performs a series of tests to help diagnose, prevent, or correct errors. It verifies that a testing device meets the necessary hardware and software requirements, indicates any checks that the testing device failed, and provides suggestions for success.

Software that is automatically downloaded at the start of a test to help manage the delivery of the test.

An optional, customized feature of DRC INSIGHT that allows students and administrators to become familiar with the online test environment and online testing tools.

DRC's powerful Web-based application that works with DRC INSIGHT to provide caching and a software toolbox to help you plan, configure, and manage your online testing environment. The TSM offers content caching for test content and response caching for WIDA Writing tests. It is installed on one or more strategic computers with sufficient bandwidth to help manage communication between test computers and DRC servers. Typically, a TSM reduces bandwidth traffic by about 50% when downloading content.

A unique, identifying URL generated on the TSM. When creating a configuration, a user enters this URL into the Central Office Services - Device Toolkit with the TSM port number to point the configuration to the TSM. The TSM Server Domain address points back to DRC to retrieve the local IP address for the TSM. The local IP address used is determined by the priority set on the TSM computer's Network Interface Card (NIC) and is listed on the Testing Site Manager (TSM) page as the TSM Server IP.

A computer that relies on servers for processing and other tasks.

Desktops that can indirectly host some supported operating systems for DRC INSIGHT (other physical devices host operating systems directly). Typically, users access virtual desktops from another operating system, on another device, across a network boundary.

A device a student interacts with as a gateway to the virtual or remote desktop. The device may or may not be capable of supporting DRC INSIGHT natively or be able to run a supported operating system.

A testing component offered with DRC INSIGHT for test items designed for the WIDA speaking tests. These items allow a student to listen to a test question using a headset and record a spoken response. Later, handscoring teams listen to the recorded responses and score them.

Volume II: Testing Site Manager (TSM)

Introduction

Introduction

About This Guide

Important Information

■ Testing Site Manager (TSM)

Benefits and Features

Volume II: Testing Site Manager (TSM) is part of a multi-volume set that describe how to configure, install, manage, and troubleshoot DRC INSIGHT. INSIGHT provides a number of tools and testing information to help you troubleshoot your testing environment and verify that it is ready for testing.

This volume describes how to configure, install, manage, and troubleshoot the TSM software. It contains configuration and installation information for the various TSM environments and describes how to use the TSM and its components.

(!) Important: Throughout this user guide, the Information icon (!) indicates important information or crucial tips.

......

The DRC Testing Site Manager (TSM) is a powerful, web-based application that provides caching and software tools to help you plan, configure, and manage your online testing environment.

A TSM offers many benefits and features, including a typical reduction in bandwidth traffic of about 50% when downloading test content.

- You can install the TSM using an easy-to-use installation wizard (requires administrative rights).
- You can populate the TSM with test content using its content caching option (strongly recommended). If you enabled Automatic Updates when you installed the TSM, after the content is installed, updates to test content are automatically downloaded.

A TSM is strongly recommended for WIDA testing.

! Important: Certain software rights are required to install and/or automatically update the TSM software. The TSM software requires Administrator rights to install it and to perform the software Automatic Update function.

TSM Overview

Content and Response Caching

The TSM is a web-based application that provides caching and software tools to help you manage your online testing. Usually, you install the TSM on one or more strategic computers with sufficient bandwidth to help manage and streamline communication between the test devices and the DRC INSIGHT server.

The TSM offers two types of caching—content caching for test content and response caching for students' Writing test responses. At test time, the TSM content caching software sends its cached test items to the testing devices. The cached test content must be current in order for students to test.

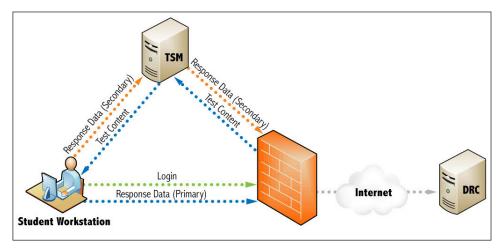


Figure: TSM Content and Response Caching

! Important: DRC strongly recommends content caching for WIDA testing to handle the large amount of data required to transmit the items to the student during testing. Response caching is optional and only applies to the Writing domain (shown in the diagram as the Response Data (Secondary) path through the TSM).

In addition to content and response caching, the TSM offers powerful diagnostic software tools, including Load Simulation Tests and Ping Trend Graphs, to help sites prepare and manage their test environment.

DRC INSIGHT's Test Practice allows students and administrators to become familiar with the online test environment and the suite of online testing tools. You should install INSIGHT on the testing computers as early as possible in the testing cycle to give students time to familiarize themselves with the INSIGHT test environment and the testing tools before they test.

TSM Diagnostic Tools

Test Practice

TSM System Requirements and Testing Information

- What's Covered in This Section
- TSM Installation and the Number of Students Testing
- Tablet Devices and the TSM
- Software Installation and Update Rights

This section contains a link to the specific hardware, software, network, and desktop requirements to configure the Testing Site Manager (TSM) and automatic software updates.

For details on the TSM configuration and the number of students that can test at the same time (concurrently), see the *Supported System Requirements for ACCESS for ELLs 2.0 and Screener*.

A TSM is used primarily to cache and manage test content and responses. iPad, Chromebook, and other tablet devices do not provide a suitable environment for a TSM. As a result, you must install the TSM software on a Windows, Mac (OS X and macOS), or Linux computer, and connect to the TSM when you install INSIGHT on the tablet device.

Certain software rights are required to install and/or automatically update INSIGHT and the TSM software.

(!) Important: INSIGHT requires Administrator rights to install it and Write access to perform the software Automatic Update function. The TSM software requires Administrator rights to install it and to perform the software Automatic Update function.

System Requirements and **Testing Information**

■ TSM System Requirements Information

The DRC system requirements information describes the specific hardware, software, network, and desktop requirements to configure INSIGHT and the TSM to work with various testing devices in different testing scenarios. This information is updated quarterly based on various factors, including changes in vendor support of various operating systems and hardware devices.

To review the current information, see the *Supported System Requirements* for ACCESS for ELLs 2.0 and Screener.

TSM Windows Installation

What's Covered in This Section

This section describes the Testing Site Manager (TSM) installation process in a Windows environment.

① Important: To make the installation process easier, DRC recommends that you install the TSM before you use the Central Office Services - Device Toolkit to create Configurations (covered in *Volume III:* Configuring Devices for Testing) and before you install INSIGHT (covered in *Volume IV: DRC INSIGHT*).

The first part of this section provides basic information about installing and uninstalling a TSM. Then, the section provides more advanced technical information about the following items:

- Managing a TSM—starting, stopping, and uninstalling
- Working with the TSM in a non-graphical (terminal) mode using Windows operating system commands

Because of the role that the TSM plays in testing, there are some special considerations regarding TSM software installation.

- The computer on which you install the TSM software should have a static IP address. If the IP address of the TSM machine changes, the TSM Server Domain address will update to the current IP address the next time the TSM communicates with DRC after the TSM is restarted. But, during the time the IP address is out of date, any testing computers that attempt to use the TSM will not point to the correct TSM machine.
- If you need to change the configuration of a TSM after it is installed, you must uninstall the TSM and install a new version. If you reinstall a TSM, you may need to reconfigure the testing devices that connect to it.
- There are two versions of the TSM for Windows: 32-bit and 64-bit.

If you plan to access multiple testing programs using the same testing computers, you may need to install more than one TSM (using multiple computers) and use INSIGHT to access more than one testing program.

- You cannot install more than one TSM on the same computer.
- You can install a TSM and INSIGHT on the same computer.
- You can use INSIGHT to access multiple testing programs (for example, ACCESS for ELLs 2.0 and your state-specific testing program) from the same device. You access these testing programs using the same DRC INSIGHT desktop shortcut. When you start INSIGHT, a page appears listing the different testing programs from which you can select.

■ Installing a TSM

■ Installing Multiple TSMs and INSIGHT

Quick Tour: Installing a TSM for Windows OS

This Quick Tour describes how to install a TSM for Windows. DRC provides an easy-to-use wizard to install the TSM software.

Note: A TSM is strongly recommended for WIDA testing.

To launch the wizard and start the installation, sign in to the WIDA Assessment Management System (WIDA AMS), open the All Applications menu bar, select General Information—Technology Downloads to display the Technology Downloads page. Click the Testing Site Manager (TSM) installer icon () for Windows. Use the correct version for the TSM computer: 32-bit or 64-bit.

To determine the type for Windows 7, click **Start**, type **system** in the Start Search box, and click **system** in the Programs list. Under System, 64-bit Operating System or 32-bit Operating System appears for System Type.

At this time, you also may want to download the INSIGHT Secure Browser Installer for Windows.

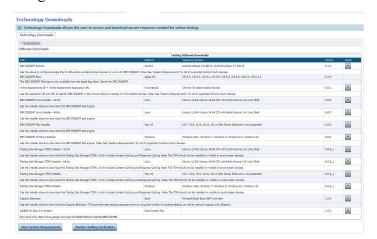
After you download the installation program, click TESTING_SITE_
 MANAGER_Setup.exe to launch the wizard and start the installation.

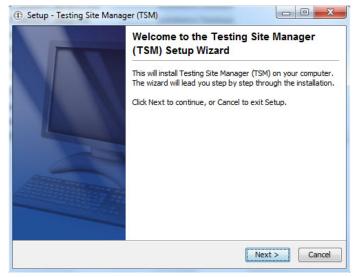
The Welcome screen appears the Testing Site Manager (TSM) Setup Wizard. Click **Next** to continue.

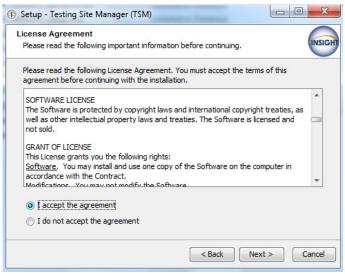
Note: On most installation windows, you have the option of clicking **Back** to return to the previous window or **Next** to proceed to the next window. Some windows display other options.

3. The DRC INSIGHT License Agreement window appears. To continue the installation, read the agreement and select the option **I accept the agreement**. (If you do not accept the agreement, the installation ends.)

When the Next button becomes active, click **Next** to continue.







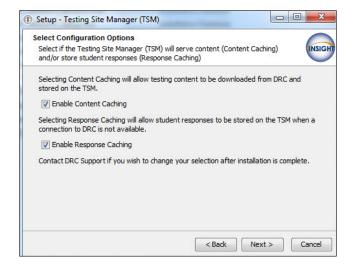
Quick Tour: Installing a TSM for Windows OS (cont.)

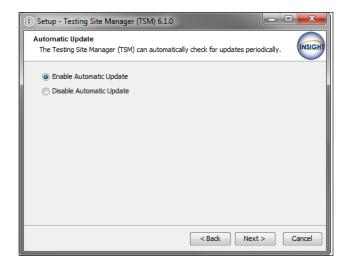
4. The Select Configuration Options window appears. On this window you specify whether to enable content caching and response caching. The default values are to enable both types of caching. After you make your selections, click **Next** to continue.

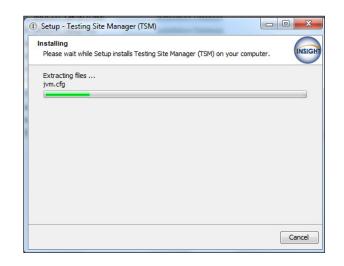
Note: DRC strongly recommends content caching for WIDA testing.

- (!) Important: Install the TSM software on a computer that will be powered on when test content is automatically updated. If the computer is not on or is unavailable, it will not be updated. Whenever you restart a computer that has the TSM software installed, or anytime you plan to use the TSM for testing, verify that the TSM software and test content are up to date before you attempt to test (see "Content Caching" on page 83).
- **5.** The Automatic Update window appears. On this window, specify whether to enable automatic TSM software updates.
 - If you select **Enable Automatic Update** (the default value), DRC updates the TSM software automatically.
 - If you select **Disable Automatic Update**, DRC notifies you whenever an update to the TSM software is available and you must update the software manually.
 - (!) Important: You use the Central Office Services - Device Toolkit to change the TSM configuration of a testing device. If you update a device's TSM configuration, the next time you start INSIGHT it automatically updates the configuration of the testing device to reflect the changes.

Click **Next** to continue. During the installation, a window appears to indicate the progress of the installation. If necessary, click **Cancel** to end the process.







Page 56

Quick Tour: Installing a TSM for Windows OS (cont.)

6. The Setup Complete window appears.

Record the TSM port numbers. You need this information when you install INSIGHT. If necessary, you can change the port numbers from the Setup Complete window.

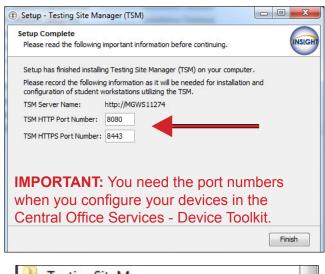
- The TSM HTTP Port Number is the port number for regular communication.
- The TSM HTTPS Port Number is the port number for encrypted communication that the INSIGHT secure web browser uses.
- ① Important: To avoid conflicts, verify that no other device is using either port. For Windows, you can enter the command netstat -a from a command prompt to display the list of ports currently being used.

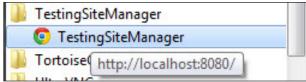
Click Finish when you are ready.

7. After the installation is complete, start the TSM from the Start menu by selecting All Programs—TestingSiteManager—TestingSiteManager.

Note: If you specified Content Caching (step 4), your standard test forms and items are downloaded automatically once the TSM interface is launched (see "Content Caching" on page 83).

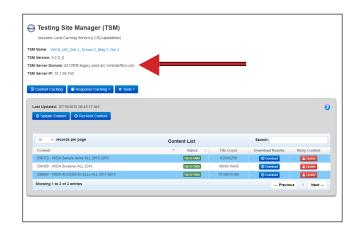
- 8. When the Enter Testing Site Manager
 Name window appears, enter a name (up
 to 40 characters with no special formatting
 requirements) to help you remember the
 location of the TSM machine in the TSM Name
 field. DRC recommends that you include some
 combination of WIDA, the state, district, school,
 and location (building and/or room number) of
 the TSM. Click Save.
- **9.** The TSM displays.







IMPORTANT: Record or copy the **TSM Server Domain** address—you need this information to configure your devices in the Central Office Services - Device Toolkit.



Managing the TSM

This section describes how to install a TSM from the command line, how to start and stop a TSM from a command line, and how to uninstall a TSM.

Installing a TSM from the Command Line

You can install a TSM in the Windows environment using the command line interface instead of the graphical interface. This type of installation is useful to install the software in unattended mode or to install it quickly on a number of computers.

To run the TSM installation in unattended mode, do the following as an administrator:

- 1. Download the TSM setup command file, TESTING_SITE_MANAGER_Setup.exe, from WIDA AMS to a directory or location that you specify.
- 2. Start a command prompt (**Start–Run–Cmd**), use the Change Directory command (CD) to navigate to the directory or location where the file was downloaded.

Execute the TESTING_SITE_MANAGER_Setup command (with appropriate options) for 32-bit machines.

TESTING_SITE_MANAGER_Setup -q

Execute the TESTING_SITE_MANAGER_Setup_64 command (with appropriate options) for 64-bit machines.

TESTING SITE MANAGER Setup 64-q

The following figure shows the list of setup options.

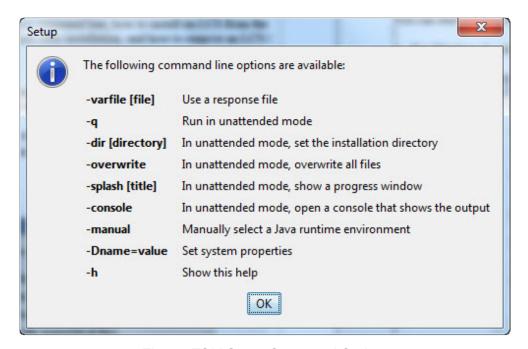
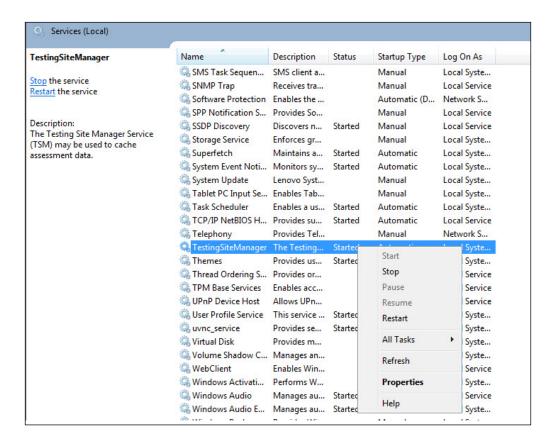


Figure: TSM Setup Command Options

Starting and Stopping the TSM

You can start and stop the TSM using the Control Panel.

1. For Windows 7, select Control Panel–System and Security–Administrative Tools–Services.



- 2. The Services window appears. Select **TestingSiteManager**.
- **3.** To stop the TSM, right-click and select **Stop**. To restart the TSM, right-click and select **Start**.

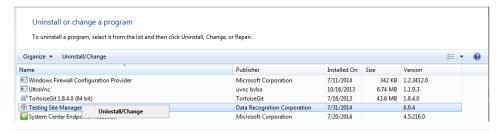
Uninstalling the TSM

You can uninstall (remove) the TSM using the Control Panel. If you want to uninstall the TSM, verify that there are no unsent responses. If there are, transmit them manually first. If the TSM has unsent stored responses, the uninstall won't finish (see "Response Caching-Viewing Unsent Student Test Responses" on page 87). If there are any unsent responses, you cannot uninstall the TSM.

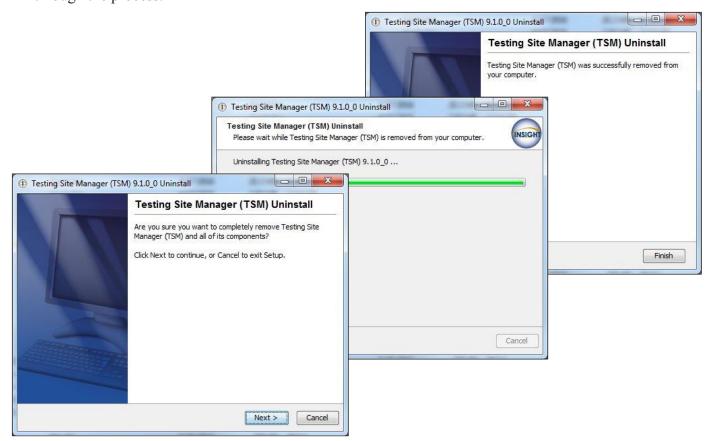
Note: If you are unable to remove a TSM, please contact DRC Customer Service.

Using the Control Panel

- 1. To uninstall the TSM using the Control Panel, select Control Panel-Programs-Uninstall a Program and select Testing Site Manager (TSM)-WIDA.
- 2. Right-click and select Uninstall/Change.



3. Click **Next** when the Testing Site Manager (TSM) Uninstall wizard appears. The wizard walks you through the process.



4. Navigate to the location where the TSM was installed and verify that is uninstalled. If you plan on installing a new TSM, please reboot the TSM machine before you install a new TSM.

TSM Mac (OS X and macOS) Installation

What's Covered in This Section

This section describes the Testing Site Manager (TSM) installation process in a Mac (OS X and macOS) environment.

① Important: To make the installation process easier, DRC recommends that you install the TSM before you use the Central Office Services - Device Toolkit to create Configurations (covered in *Volume III: Configuring Devices for Testing*) and before you install INSIGHT (covered in *Volume IV: DRC INSIGHT*).

First, this section provides basic information about installing and uninstalling a Testing Site Manager (TSM) using the standard Mac graphical interface. Then, the section provides more advanced technical information about the following items:

- Managing a TSM: starting, stopping, and uninstalling
- Working with a TSM in a non-graphical (terminal) mode using Mac (OS X and macOS) operating system commands

Because of the role that the TSM plays in testing, there are some special considerations regarding TSM software installation.

- It is best if the computer on which you install the TSM software has a static IP address. If the IP address of the TSM machine changes, the TSM Server Domain address will update to the current IP address the next time the TSM communicates with DRC. But, during the time the IP address is out of date, any testing computers that attempt to use the TSM will not point to the correct TSM machine, which will cause a content retrieval error or a TSM connection error.
- If you need to change the configuration of a TSM after it is installed, you must uninstall the TSM and install a new version. If you reinstall a TSM, you may need to reconfigure the testing devices that connect to it.
- A TSM cannot be installed on a Mac (OS X and macOS) device that is running macOS server software.

If you plan to perform multiple types of assessments using the same testing computers, you may need to install more than one TSM (using multiple computers) and use INSIGHT to access more than one testing program.

- You cannot install more than one TSM on the same computer.
- You can install a TSM and INSIGHT on the same computer.
- You can use INSIGHT to access multiple testing programs (for example, ACCESS for ELLs and your state-specific testing program) from the same device. You access these testing programs using the same DRC INSIGHT desktop shortcut. When you start INSIGHT, a page displays listing the different testing programs from which you can select.

■ Installing a TSM

■ Installing Multiple TSMs and INSIGHT

Quick Tour: Installing a TSM for Mac OS X and macOS

This Quick Tour describes how to install a TSM in the Mac (OS X and macOS) environment. DRC provides an easy-to-use wizard to install the TSM software.

Note: A TSM is strongly recommended for WIDA testing.

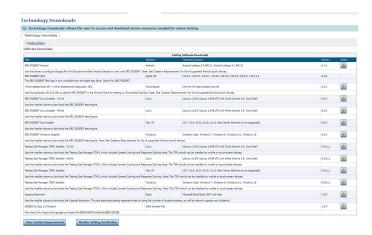
- To launch the wizard and start the installation, sign in to the WIDA Assessment Management System (WIDA AMS), open the All Applications menu bar, select General Information—
 Technology Downloads, and click the Testing Site Manager (TSM) installer icon () for Mac OS. At this time, you also may want to download the Macintosh Installer for INSIGHT.
- After you have downloaded the installation program, double-click the TESTING_SITE_MANAGER_Setup. dmg file and double-click the Testing Site Manager (TSM) Installer to start the installation.

Note: You must be a Mac System Administrator to install the TSM from this file

3. The Welcome to the Testing Site Manager (TSM) Setup Wizard screen displays.

Note: On most of the installation windows, you can click **Back** to return to the previous window, **Next** to proceed to the next window, and **Cancel** to cancel the installation. Click **Next** to continue.

4. The DRC INSIGHT License Agreement windows displays. Read the agreement and select the option I accept the agreement. When the Next button becomes active, click Next to continue.







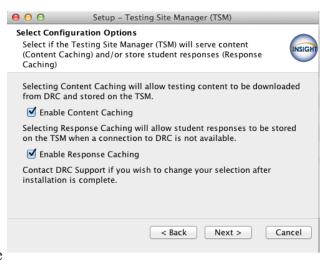
Quick Tour: Installing a TSM for Mac OS X and macOS (cont.)

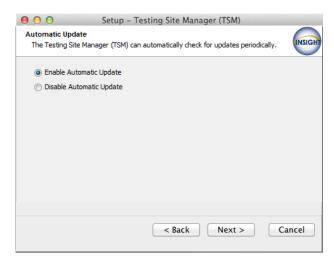
5. The Select Configuration Options window displays.
On this window you specify whether to enable content caching and/or response caching. The default values are to enable both types of caching. After you make your selections, click **Next** to continue.

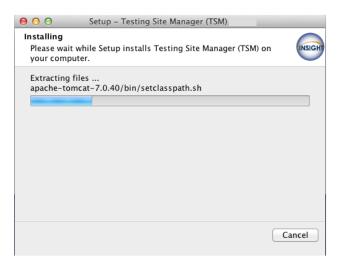
Note: DRC strongly recommends content caching for WIDA testing.

- (!) Important: Install the TSM software on a computer that will be powered on when the TSM software or test content is automatically updated. If the computer is not on or is unavailable, it will not be updated. Whenever you restart a computer that has the TSM software installed, or anytime you plan to use the TSM for testing, verify that the TSM software and test content are up to date before you attempt to test (see "Content Caching" on page 83).
- **6.** The Automatic Update window displays. On this window, specify whether to enable automatic TSM software updates.
 - If you select Enable Automatic Update (the default value), DRC updates the TSM software automatically.
 - If you select **Disable Automatic Update**, DRC notifies you whenever an update to the TSM software is available and you must update the software manually.
 - ① Important: You use the Central Office Services Device Toolkit to change the TSM configuration of a testing device. If you update a device's TSM configuration, the next time you start INSIGHT it automatically updates the configuration of the testing device to reflect the changes.

After you have made your selection, click **Next** to start the installation. During the installation, a window displays to indicate the progress of the installation. If necessary, you can click **Cancel** to end the installation process.







Quick Tour: Installing a TSM for Mac OS X and macOS (cont.)

- 7. When the installation completes, the Setup Complete window displays. Record the TSM port numbers. You need this information to configure the device in the Central Office Services Device Toolkit. If necessary, you can change the port numbers from the Setup Complete window.
 - The TSM HTTP Port Number is the port number for regular communication.
 - The TSM HTTPS Port Number is the port number for encrypted communication that the INSIGHT secure web browser uses.
 - ① Important: To avoid conflicts, verify that no other device is using either port. For Mac OS X and macOS, use the Network Utility located at Applications/Utilities/Network.

Click Finish when you are ready.

8. Start the TSM by selecting **Applications**— **TestingSiteManager-TestingSiteManager.url**.

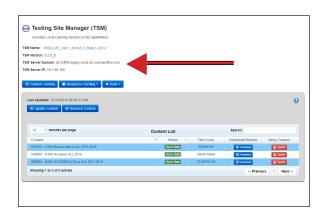
Note: If you specified Content Caching (step 5), your standard test forms and items are downloaded automatically once the TSM interface is launched (see "Content Caching" on page 83).

- 9. When the Enter Testing Site Manager Name window displays, enter a name (up to 40 characters with no special formatting requirements) in the TSM Name field to help you remember the location of the TSM machine. DRC recommends that you include some combination of WIDA, the state, district, school, and location (building and/or room number) of the TSM. Click Save.
- **10.** The TSM displays
- 11. After installation is complete, select the TESTING_SITE_MAN volume from the desktop, Ctrl-click, and select Eject "TESTING_SITE_MAN" to unmount the volume and avoid potential conflicts with automatic updates.





IMPORTANT: Record or copy the **TSM Server Domain** address—you need this information to configure your devices in the Central Office Services - Device Toolkit.





Managing the TSM

This section describes how to start and stop a TSM from a command line and how to uninstall a TSM.

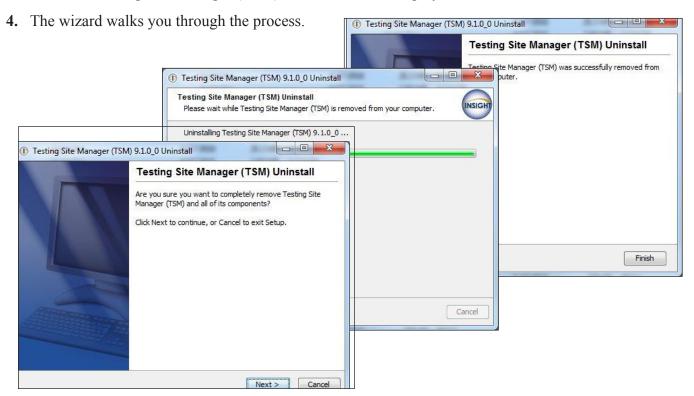
Starting and Stopping the TSM

The TSM is a service that executes in the background without a standard graphical window. Technology Coordinators should be familiar with starting and stopping the TSM with the TESTING_SITE_MANAGER script. You can use the **launchd** and **launchctl** commands to manage services. By default, the TSM is started after installation and launches anytime the computer is started.

Uninstalling the TSM

Before you attempt to uninstall the TSM, verify that there are no unsent responses in the TSM. If there are, transmit them manually (see "Response Caching-Viewing Unsent Student Test Responses" on page 87). If there are any unsent responses, you cannot uninstall the TSM.

- 1. To uninstall (remove) the TSM, select **Applications—TestingSiteManager—Testing Site Manager** (TSM) Uninstaller.
- 2. Enter your Mac Administrator log-in information.
- 3. When the Testing Site Manager (TSM) Uninstall wizard displays, click Next.



5. Verify that the **Testing Site Manager** folder has been removed from the Applications folder. If you plan to reinstall a TSM, reboot the machine before you reinstall.

Note: If you are unable to remove a TSM, please contact DRC Customer Service.

TSM Linux Installation

What's Covered in This Section

This section describes the Testing Site Manager (TSM) installation process in a Linux environment.

① Important: To make the TSM installation process easier, DRC recommends that you install the TSM before you use the Central Office Services - Device Toolkit to create Configurations and before you install INSIGHT (covered in *Volume III: Configuring Devices for Testing*) and before you install INSIGHT (covered in *Volume IV: DRC INSIGHT*).

The first part of this section provides basic information about installing and uninstalling the TSM using the standard Linux interface. Then, the section provides more advanced technical information about the following items:

- Managing a TSM: starting, stopping, changing the default communication port, and uninstalling
- Working in the terminal using Linux operating system commands

Note: In this section, we assume that as an experienced Linux user you are familiar with Linux concepts such as Terminal mode, the Boot-Up Manager software, and the Ubuntu Software Center.

Because of the role that the TSM plays in testing, there are some special considerations regarding TSM software installation.

- The computer on which you install the TSM software should have a static IP address (an address that does not change when the computer is restarted or rebooted). If the IP address of the TSM machine changes, the TSM Server Domain address will update to the current IP address the next time the TSM communicates with DRC. But, during the time the IP address is out of date, any testing computers that attempt to use the TSM will not point to the correct TSM machine.
- If you need to change the configuration of a TSM after it is installed, you must uninstall the TSM and install a new version. If you reinstall a TSM, you may need to reconfigure the testing devices that connect to it.

If you plan to perform multiple types of assessments using the same testing computers, you may need to install more than one TSM (using multiple computers) and use INSIGHT to access more than one testing program.

- You cannot install more than one TSM on the same computer.
- You can install a TSM and INSIGHT on the same computer.
- You can use INSIGHT to access multiple testing programs (for example, ACCESS for ELLs 2.0 and your state-specific testing program) from the same device. You access these testing programs using the same DRC INSIGHT desktop shortcut. When you start INSIGHT, a page displays listing the different testing programs from which you can select.

■ Installing a TSM

■ Installing Multiple TSMs and INSIGHT

■ Installing 32-bit Java Libraries

① Important: On some 64-bit Linux systems, you must install the 32-bit Java libraries for the INSIGHT installation program to run. To install these libraries, enter the following commands from a Terminal session.

sudo -i

cd /etc/apt/sources.list.d

echo "deb http://old-releases.ubuntu.com/ubuntu/ raring main restricted universe multiverse" >ia32-libs-raring.list

apt-get update

apt-get install ia32-libs

If the apt-get install ia32-libs command fails, enter the following commands.

sudo dpkg --add-architecture i386

sudo apt-get update

sudo apt-get install ia32-libs

Quick Tour: Installing a TSM for Linux

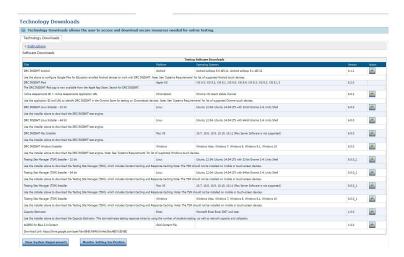
This Quick Tour describes how to install the Testing Site Manager (TSM) for Linux. DRC provides an easy-to-use wizard to install the TSM software. In a Linux environment, you must enter a few commands before you can run the wizard.

Note: A TSM is strongly recommended for WIDA testing.

- To launch the wizard and start the installation, log on to the WIDA Assessment Management System (WIDA AMS), open the All Applications menu bar, and select General Information—Technology Downloads to display the Technology downloads page.
- 2. Click the Testing Site Manager (TSM) installer icon () for Linux to download the TSM setup shell file, TESTING_SITE_MANAGER_Setup.sh, to the Downloads directory on your testing computer. Use the correct version for the TSM computer: 32-bit or 64-bit.

Note: Depending on the web browser you are using, a pop-up window may display. If it does, select **Save File** and click **OK**. Other browsers automatically download the installation file to your Downloads folder.

- **3.** Start a Terminal session and use the **cd** (change directories) command to navigate to your Downloads directory.
- **4.** Use the **ls** command to verify that the TESTING_SITE_MANAGER_Setup.sh file is in the Downloads directory. If it is not there, download it again.







Quick Tour: Installing a TSM for Linux (cont.)

5. Enter the following command (all Linux commands are case-sensitive) to start the installation:

sudo sh TESTING_SITE_ MANAGER_Setup.sh

The sudo command gives you temporary administrator privileges and allows you to run the shell file.

If prompted, enter your administrator password at the prompt. Linux unpacks the shell file and launches the wizard to start the installation. The installation program creates an application folder in the /opt or / usr/local directory.

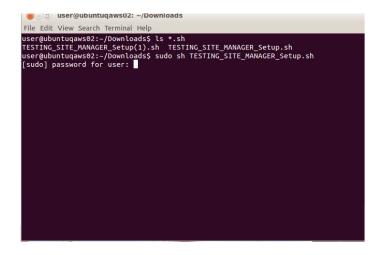
! Important: On some 64-bit systems, you must install 32-bit Java libraries for the installation program to run. If you need to install these libraries, see "Installing 32-bit Java Libraries" on page 69. After you install the libraries, rerun the sudo sh TESTING_SITE_MANAGER_Setup.sh command.

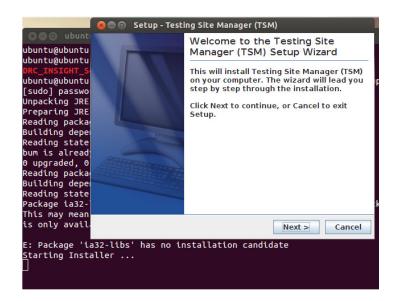
6. The Welcome to the DRC INSIGHT Testing Site Manager (TSM) Setup Wizard screen displays.

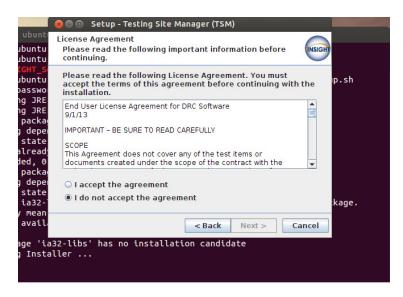
Click Next to continue.

7. The DRC INSIGHT License Agreement window displays. To continue the installation, read the agreement and select the option **I accept the agreement**. (If you do not accept the agreement, the installation ends.)

When the Next button becomes active, click **Next** to continue.







Quick Tour: Installing a TSM for Linux (cont.)

8. The Select Configuration Options window displays. On this window you specify whether to enable content caching and/ or response caching. The default values are to enable both types of caching. After you make your selections, click **Next** to continue.

Note: DRC strongly recommends content caching for WIDA testing.

......

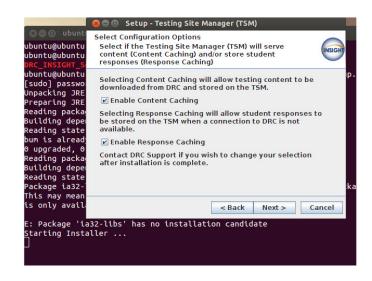
- (!) Important: For content caching, install the TSM software on a computer that will be available when test content is automatically updated. Whenever you restart a computer that has the TSM software installed, or anytime you plan to use the TSM for testing, verify that the TSM content is up to date before you attempt to test (see "Content Caching" on page 83).
- **9.** The Automatic Update window displays. On this window, specify whether to enable automatic TSM software updates.
 - If you select **Enable Automatic Update** (the default value), DRC updates the TSM software automatically.
 - If you select **Disable Automatic Update**, DRC notifies you whenever an update to the TSM software is available and you must update the software manually.

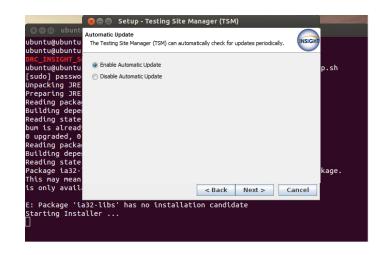
After you have made your selection, click **Next** to continue.

.....

......

① Important: If you need to change the configuration of a TSM after it is installed, you must uninstall the TSM and install a new version. If you reinstall a TSM after you have installed INSIGHT, you may need to reset the TSM configuration properties for the testing computers that use the TSM (see *Volume III: Configuring Devices for Testing.*)





Quick Tour: Installing a TSM for Linux (cont.)

10. During the installation, a window displays to indicate the progress of the installation. If necessary, you can click **Cancel** to end the installation process.

When the installation completes, the Setup Complete window displays.

Record the TSM port numbers. You need this information when you install INSIGHT. If necessary, you can change the port numbers from the Setup Complete window.

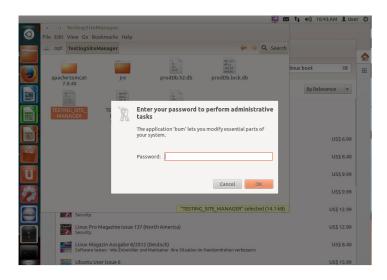
- The TSM HTTP Port Number is the port number for regular communication.
- The TSM HTTPS Port Number is the port number for encrypted communication that the INSIGHT secure web browser uses.

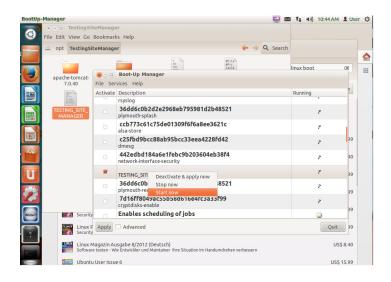
① Important: To avoid potential conflicts, be certain no other device is using either port. For Linux, you can enter the command netstat -p to display the list of ports currently being used.

Click Finish when you are ready.

- **11.** Open the Linux Boot-Up Manager. You may need to provide your administrator password.
- 12. Locate TESTING_SITE_MANAGER in the list, select it, right-click, and select Start Now. When the Service starts a pop-up dialog displays, click OK.







Quick Tour: Installing a TSM for Linux (cont.)

13. Start a Web browser and enter the following address into the address bar:

http://servername:8080/

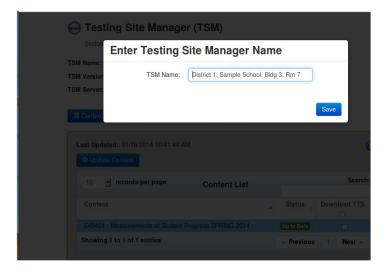
where: servername is the TSM Server Name from step 10.

In our example, it is **ubuntu-VirtualBox**.

When the Enter Testing Site Manager Name window displays, enter a name in the TSM Name field (up to 40 characters with no special formatting requirements) to help you remember the location of the TSM machine. DRC recommends that you include some combination of WIDA, the state, district, school, and location (building and/or room number) of the TSM.

Click OK.



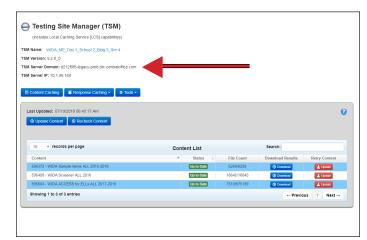


14. The TSM displays.

Note: If you specified Content Caching (step 8), your standard test forms and items are downloaded automatically once the TSM interface is launched (see "Content Caching" on page 83).

Click **Update Content** to load the latest test versions. When the TSM updates the content cache, the Status field changes to Up to Date.

IMPORTANT: Record or copy the **TSM Server Domain** address—you need this information to configure your devices in the Central Office Services - Device Toolkit.



Managing the TSM

This section describes how to start and stop the TSM from a command line and how to uninstall a TSM. To perform the commands in this section you must open a Terminal window.

Starting and Stopping the TSM from the Terminal

After the TSM software is installed, the Linux Administrator must start the associated service. The Linux Administrator can start or stop the TSM services in Terminal mode by using the start and stop commands as shown in the following example.

sudo /opt/TestingSiteManager/TESTING_SITE_MANAGER start sudo /opt/TestingSiteManager/TESTING_SITE_MANAGER stop

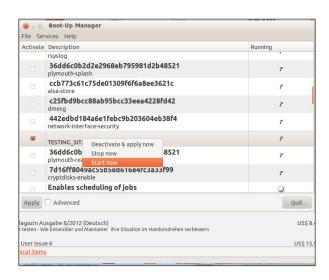
Starting and Stopping the TSM Using the Boot-Up Manager Software

A Linux Administrator also can use the Boot-Up Manager to stop or start a service and define whether to launch a service automatically on startup.

Note: The Boot-Up Manager software is installed automatically with the TSM. You also can install it from the Ubuntu Software Center or by using the **apt-get install bum** command.

To start the TSM service, stop the TSM service, or launch the TSM service automatically at startup, do the following:

- 1. Start the Boot-Up Manager.
- 2. Locate TESTING_SITE_MANAGER.
- **3.** Check the **Activate** checkbox to launch the service automatically on startup. To start or stop the service, right-click and select **Start now** or **Stop now**.

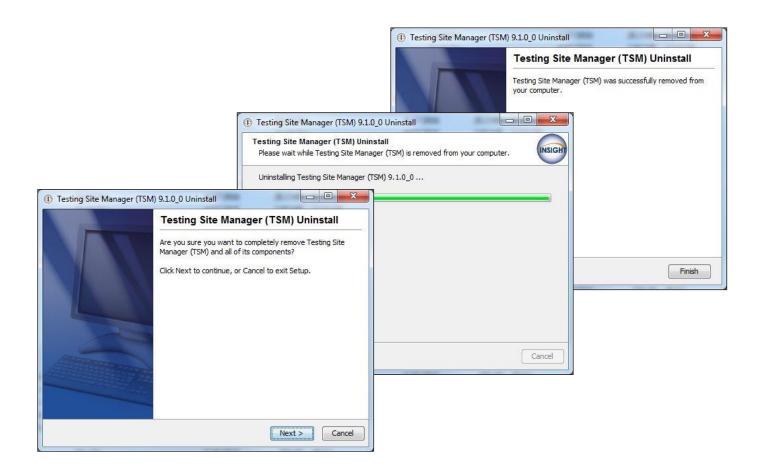


Uninstalling the TSM

Before you attempt to uninstall the TSM, verify that there are no unsent responses in the TSM. If there are, transmit them manually first (see "Response Caching-Viewing Unsent Student Test Responses" on page 87). If there are any unsent responses, you cannot uninstall the TSM.

- 1. To uninstall the TSM, start Terminal mode.
- 2. Navigate to the TSM directory, /opt/TestingSiteManager.
- 3. Enter the command sudo sh uninstall
- **4.** Click **Next** when the Uninstall wizard displays (see the figure), follow the prompts, and click **Finish** when you are done.

Note: The uninstall process may leave log or configuration files in the installation directory or the user home folder. You can ignore these files, or delete them using the **rm** command.



Note: If you are unable to remove a TSM, please contact DRC Customer Service.

Working with the TSM

What's Covered in This Section

■ Testing Site Manager Tools

The Testing Site Manager (TSM) contains a number of software tools to help you plan, configure, manage, and troubleshoot your online testing environment, including caching software to store tests and/or student test responses. This section describes how to use the TSM, as well as caching and the various TSM software tools that are available.

The following table overviews TSM caching and its software tools.

Item	Description
Content Caching	The TSM stores tests and lets you update them to the most current versions for testing.
Response Caching	In the event the Internet connection to DRC is lost, the TSM stores test responses and attempts to transmit them at fifteen-minute intervals to DRC.
	Response caching also allows you to review details about unsent responses stored in the TSM and responses the TSM transmitted to DRC (historical responses). For WIDA testing, Response caching only applies to the Writing domain.
Load Simulation Test	The Load Simulation Test helps you estimate variations in network responsiveness based on the number of students testing at the same time, the current network traffic, the amount of available bandwidth, and other site-specific factors.
Ping Trend Graphs	Ping Trend Graphs help you determine the best time of day to test based on the variances in speed, connectivity, and responsiveness of your network communication.
Load Balancing	The TSM offers a Load Balancing Registration feature. If your site has configured and uses load balancing hardware and software, you can use this feature to register a load balancer IP address for your pool of TSM servers to help manage your workload more efficiently.
	The TSM load balancing feature is supported for content caching only—response caching is not supported for load balancing.

(!) Important: A TSM is strongly recommended for WIDA testing.

Using the TSM

This section describes how to use the TSM and its basic functions.

To start the TSM on a Windows 7 machine, select **Start–All Programs–TestingSiteManager– TestingSiteManager**. On a Mac, select **Applications–TestingSiteManager–TestingSiteManager.url**.

Alternatively, if you know the TSM Server IP address (see page 80), you can display the TSM from a web browser by entering the following string: http://TSM Server IP address:8080

Replace *TSM Server IP address* with the actual IP address of the TSM. And, if you did not use the default value of 8080 for the port number during installation, replace 8080 with the actual port number you assigned to the TSM.

The first time you start the TSM, the Enter Testing Site Manager Name dialog box displays. In the TSM Name field, enter a name that will help you remember the location of the TSM machine and click **Save**.

Note: DRC recommends that you include the district, school, and location (building and/or room number) of the TSM. The name you choose is limited to 40 characters and there are no special formatting requirements.

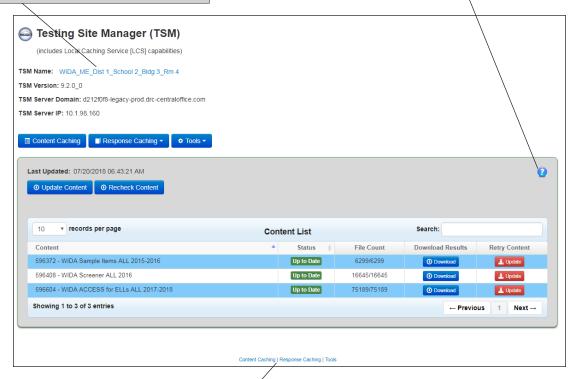
You can click on the name of the TSM to edit it (this is the name you entered when you started the TSM for the first time).

Enter Testing Site Manager Name

TSM Name: WIDA ME_Dist 1_School 2_Bidg 3_Rm 4|

Save

The **Help** icon () is displayed on every page in the TSM. Click it to display online help for the page you are currently on.

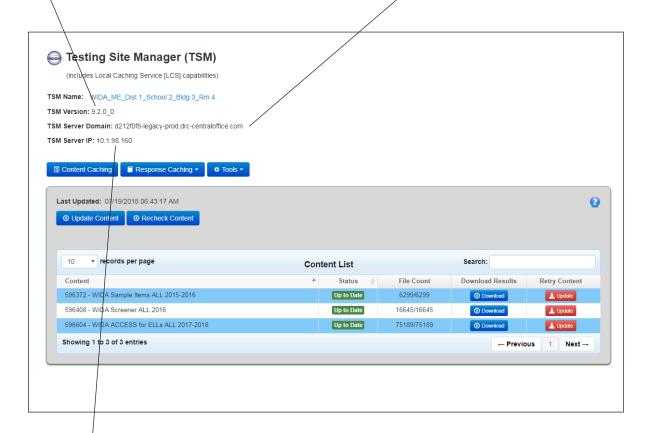


There are active page links to all of the functions currently configured in the TSM.

Using the TSM (cont.)

The **TSM Version** indicates the version number of the TSM software.

The **TSM Server Domain** indicates the domain address of the TSM server. Use this information to identify your TSM server when you configure devices in the Central Office Services - Device Toolkit.



The **TSM Server IP** indicates the IP address of the TSM server. The IP address is the address the TSM Server Domain translates to and the address testing devices will use to interact with the TSM. If this is the wrong address, you must modify your network adaptor priority to point to the device that the testing devices will connect to.

Notes:

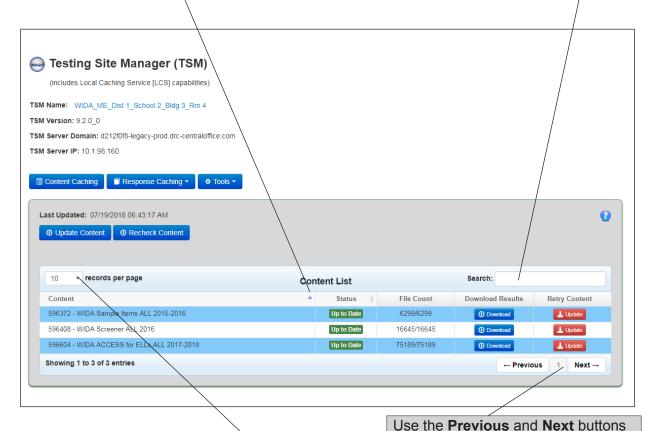
- The IP address chosen by the TSM is determined by the priority of the network adaptor in the Network Interface Card (NIC). To change the IP address the TSM selects you must set the TSM's IP address to have a priority of 1.
- DRC recommends that IP address be a static IP address, if possible.
- If the IP address is not resolving correctly, you will need to contact the network administrator that manages the DNS in your district.

Using the TSM (cont.)

You can sort the data in a column.

- Click the up arrow icon (
 next to the column header to sort the column data in ascending order, either alphabetically or by date, depending on the type of data.
- Click the down arrow icon () next to the column header to sort the data in descending order, either alphabetically or by date, depending on the type of data.

Throughout the TSM you can use the Search field to search for specific information, such as tests, student responses, and simulation results, and filter the display.



Use the **records per page** drop-down menu to specify the number of records to display at once. You can select **10** (the default value), **25**, **50**, **100**, or **All** (for all records).

to move backward and forward between pages in the display. The number between the buttons indicates the number of the page you are currently viewing.

Working with the TSM

Using Content Caching

The TSM can cache (store) test items using its Content Caching option and this caching option is configurable. DRC strongly recommends content caching for WIDA testing. Before testing occurs, content caching stores copies of the test items that you can keep updated, manually or automatically, to guarantee that students are using the correct version of the test.

① Important: With content caching, each morning before testing begins, verify that your TSM has the most current test items (see "Content Caching" on page 83).

Testing with Content Caching

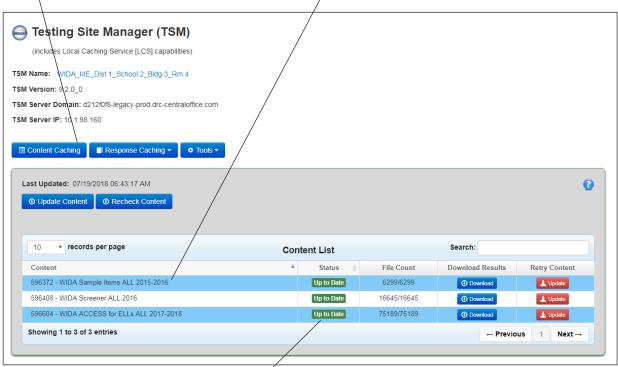
With TSM content caching, before testing begins tests are downloaded from DRC's servers across the Internet and stored on the school or district computer where the TSM software is installed. When the student logs in at test time, the test content is downloaded from the TSM to the student's testing device.

Content Caching

The correct test content must be available when students start testing—students can only test using test content that is up to date. Because there may be updates to test content between the time the TSM was installed and testing begins, it is important to verify that the test items stored in the TSM are up to date. Before testing can begin, you must replace any test content that is out of date with the most current versions from DRC.

The **Content Caching** button displays the tests available on the TSM. These tests are available to download to INSIGHT.

Each testing administration in the cache is identified by a unique ID number followed by the name of the specific assessment. In some examples in this user guide, a generic identifier is displayed.



The **Status** column in the Content List table indicates whether all test forms in an administration are the most current version (up to date).

- If all of the most current versions of tests in an administration are on the TSM, the Status column displays **Up to Date** in green text.
- If the most current versions are not on the TSM, the Status column displays Out of Date
 in red text.

Note: An administration must have a status of Up to Date before it is administered. Otherwise, students receive an error message when they log in and will be unable to test.

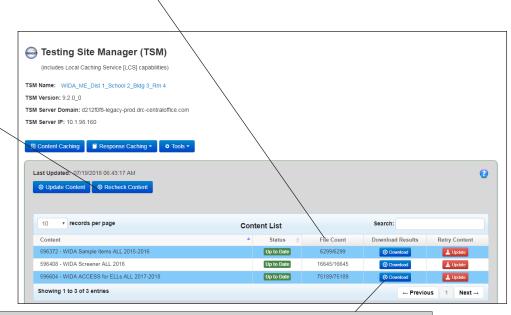
Content Caching (cont.)

The **File Count** column in the Content List table indicates the number of files currently in the TSM and the total number that will be in the TSM when all of the necessary files are downloaded.

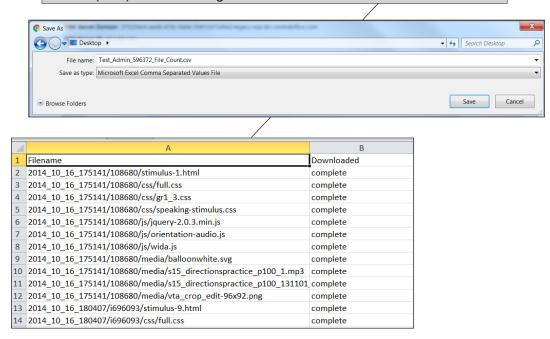
The format is X/Y, where X is the current number of files and Y is the total number of files.

When the TSM is up to date, these numbers should be the same.

Click the Recheck Content button to check the TSM for corrupted files.



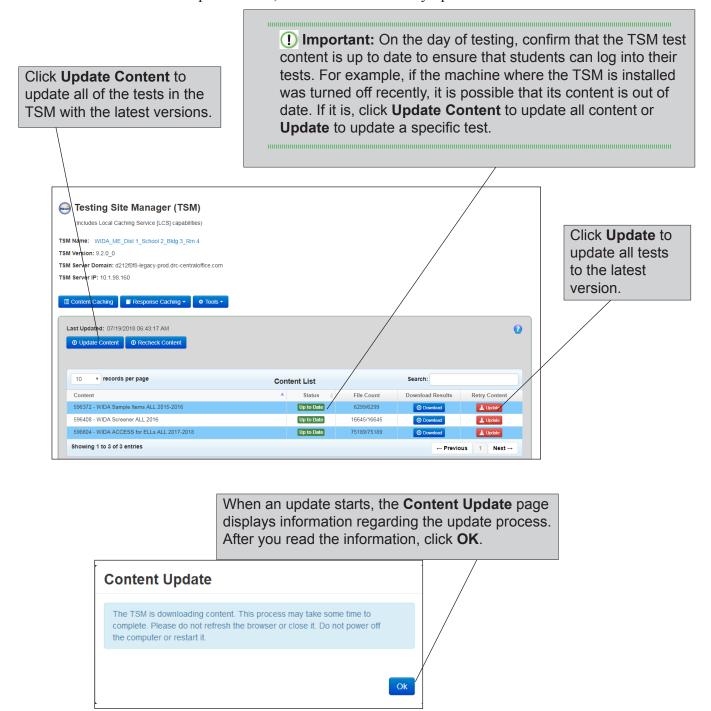
The **Download Results** column in the Content List table contains a **Download** button that you can click to download a comma-separated values (.csv) file containing a list of all of the files in the TSM.



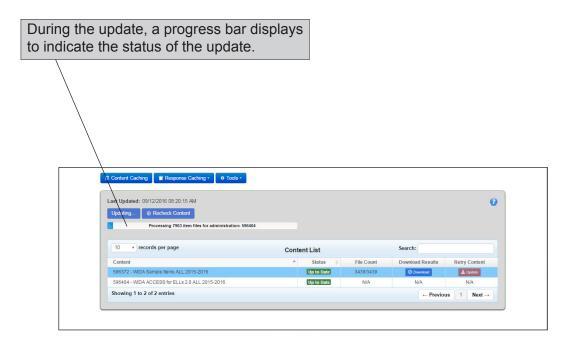
Content Caching (cont.)

To update all tests manually, click the **Update Content** button at the top of the page. To update a specific test, click the **Update** button in the Retry Content column for the test you want to update. When you click **Update Content** or **Update**, the latest test content is downloaded. After the update is complete, the status changes to Up to Date and the **Last Updated** date and time is updated.

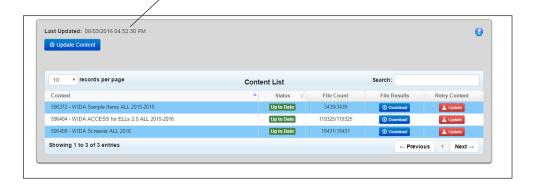
Note: The TSM also automatically checks for test content updates at regular intervals. If the computer where the TSM is installed is powered on, the TSM automatically updates the test content.



Content Caching (cont.)



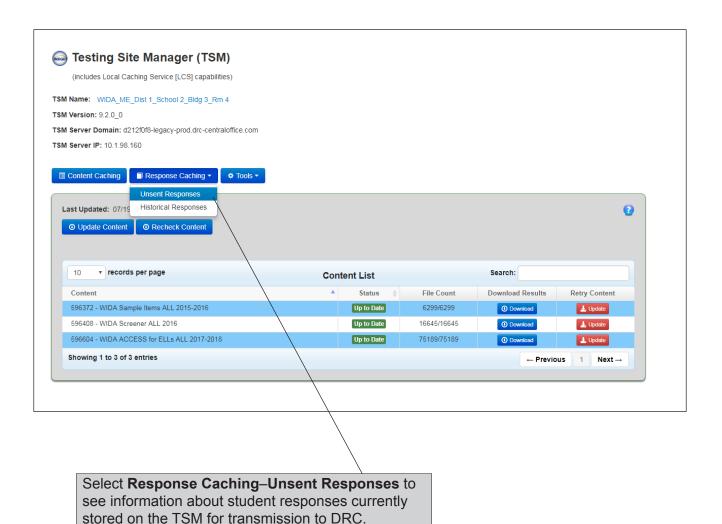
When the update is finished, the status changes to Up to Date, the Updating button reverts to Update Content, and the **Last Updated** date and time is updated.



Response Caching—Viewing Unsent Student Test Responses

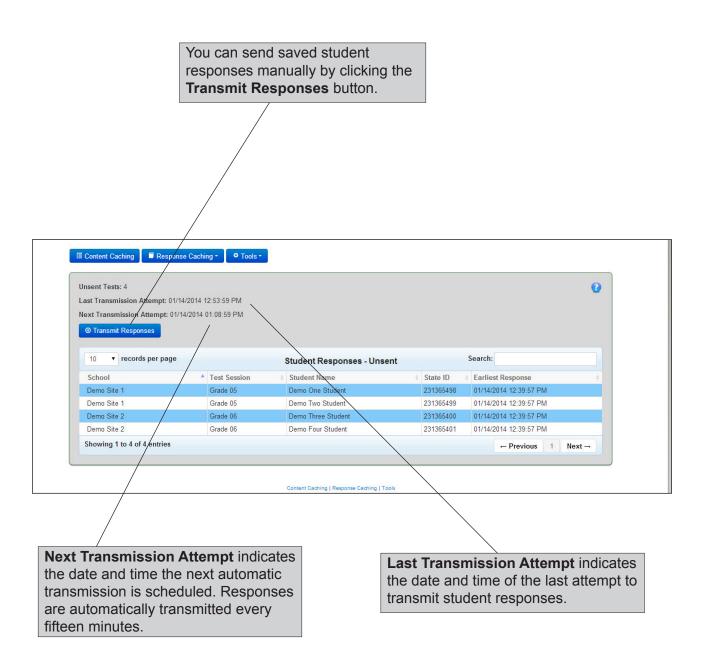
If response caching is enabled, to check whether student Writing test responses have been transmitted to DRC and for detailed information about those responses, Select **Response Caching–Unsent Responses**.

Note: If the Internet connection with DRC is lost while testing, student Writing test responses are saved to the TSM. When the TSM is communicating with DRC, these stored responses are transmitted automatically every fifteen minutes.

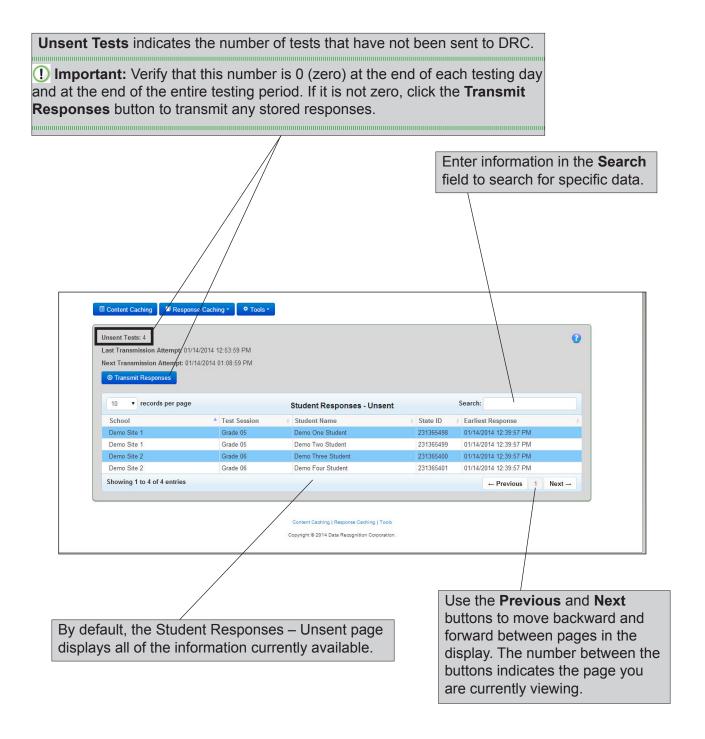


Response Caching—Viewing Unsent Student Test Responses (cont.)

When you select **Unsent Responses**, the Student Responses–Unsent tab displays information about student responses currently stored in the TSM that are waiting to be transmitted to DRC.

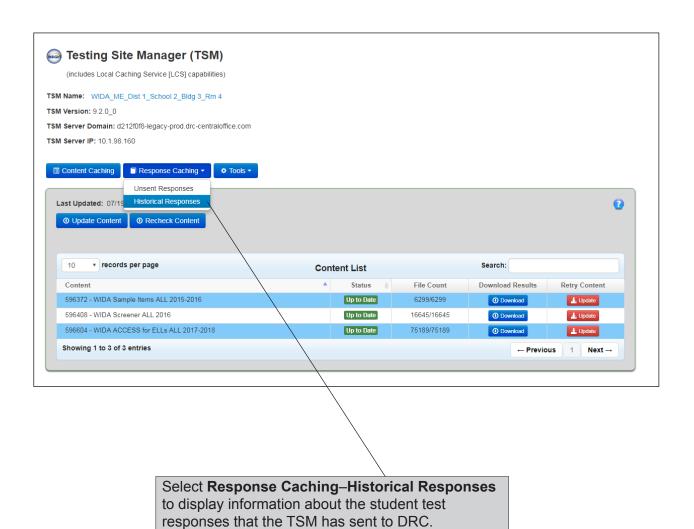


Response Caching—Viewing Unsent Student Test Responses (cont.)

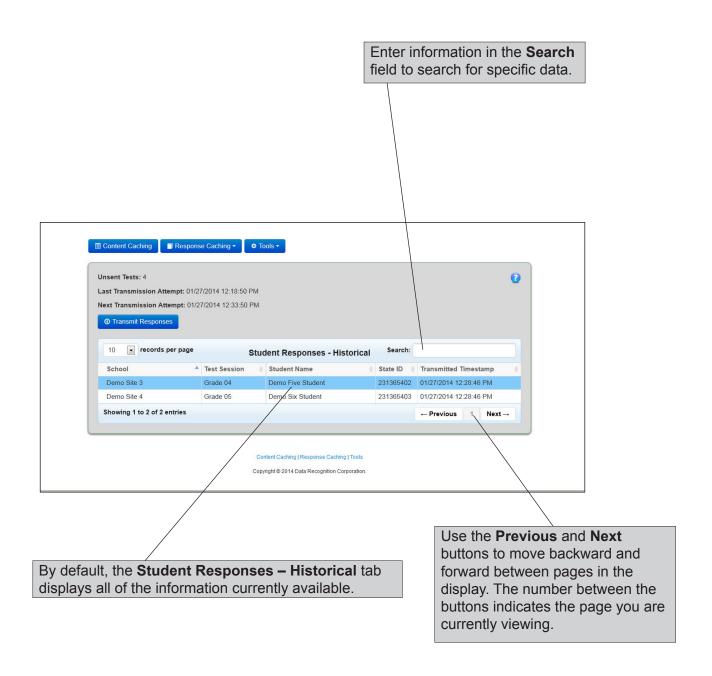


Response Caching—Viewing Historical Test Responses

Select **Historical Responses** from the drop-down menu to display information about student responses that have been transmitted to DRC.



Response Caching—Viewing Historical Test Responses (cont.)



Working with the TSM

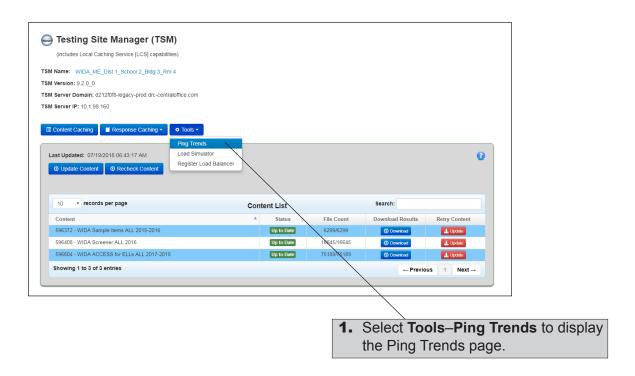
■ Ping Activity

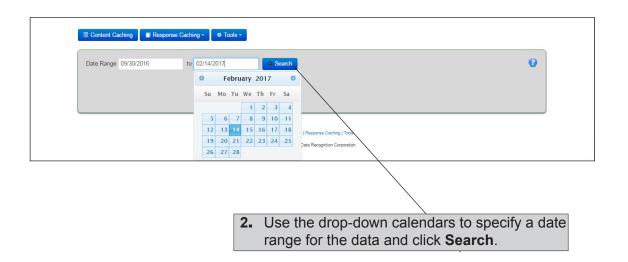
When the TSM "pings" the IP address of the DRC server, the network sends data packets from the TSM to the DRC server and back. The network also calculates the time, in milliseconds, it takes for the data to be received. The longer this time is, the longer it has taken the DRC server to receive the data packets (usually because of excess network traffic).

This rate of data transfer across a network is referred to as latency. Knowing the latency is useful for helping to determine peak network traffic times and for analyzing the best times for testing.

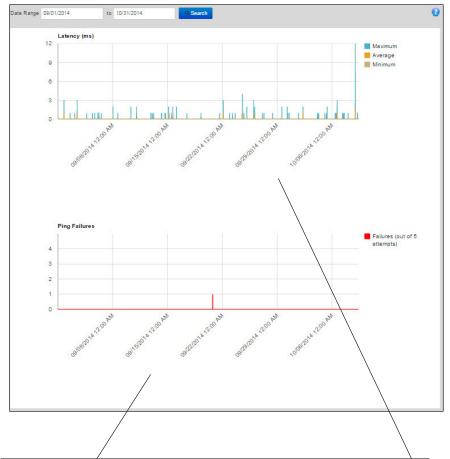
Graphing Ping Activity

Select **Tools**—**Ping Trends** to graph the time that was required by the TSM to ping the DRC servers for a date range that you specify, as well as the number of ping failures during the same date range.





Graphing Ping Activity (cont.)

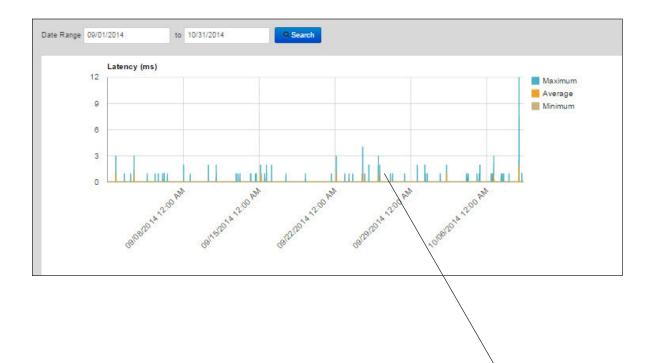


Two graphs display network communication information for the date range.

- The first graph reveals the latency of the network.
- The second graph indicates the number of ping failures.

Graphing Ping Activity (cont.)

The first graph displays a measure of the latency during the date range. Latency is a measure of the time delay in a system—the greater the latency, the slower the communication.



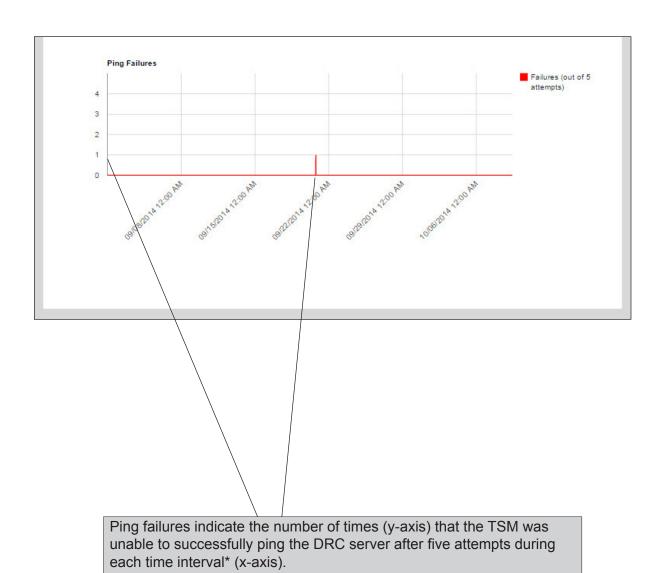
In this graph, latency represents the time required (in milliseconds) for ping attempts during the time period, organized by color:

- The blue line indicates the maximum amount of time needed for ping attempts.
- The orange line indicates the average amount of time needed for ping attempts.
- The tan line indicates the minimum amount of time needed for ping attempts.

As the time required for ping attempts increases, peaks or spikes appear that can indicate increased network traffic and slower response time. You can use this information to determine optimal testing times.

Graphing Ping Activity (cont.)

The second graph displays the number of ping failures during the date range. Ping failures are a good indicator of system availability—a spike, or high failure rate, indicates a time period of poor communication between the TSM and DRC. Similarly, a low failure rate indicates a good time for testing. You can use this information to determine optimal testing times.



*To graph ping failures, the TSM divides the date range you specified

into equal date and time intervals.

■ Load Simulation Testing

Technology Coordinators can perform load simulations to estimate the amount of time it will take during testing to download tests and upload responses. The following are prerequisites and tips for performing load simulation tests:

• The TSM must be installed, running, and connected to each testing device that you plan to include in the simulation.

.....

- **! Important:** For a load simulation test, limit the number of testing devices per TSM to 100. Attempting to perform a load simulation test with more than 100 devices may cause the TSM to become unresponsive. If this occurs, you may have to uninstall and reinstall the TSM. Note that the number of simulated testers (100) for a TSM is lower than the number of actual testers for a TSM.
- DRC recommends that you run the simulation three times during your load simulation testing. Run it twice specifying the TSM as the source for form content and once specifying DRC as the source for form content.
- Run different load simulations with different groups of devices to ensure that all devices are included in multiple simulations.
- INSIGHT must be installed on each testing computer that you plan to include in the simulation.
- The System Readiness Check must be displayed on the screen of each testing computer that you plan to include in the simulation.

Note: For general questions and answers regarding Load Simulation Testing, see *Volume V: Troubleshooting*.

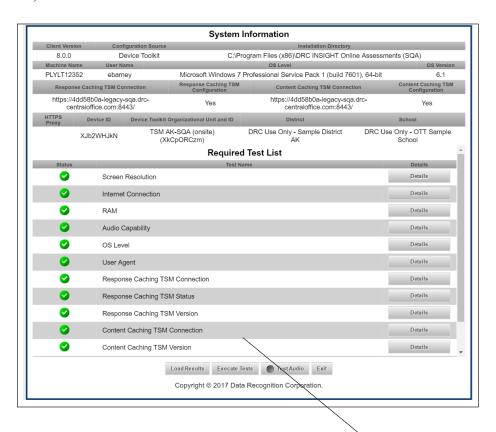
Load Simulation Testing and Actual Testing (!) Important: Enable load simulations only when you are actually conducting a load simulation test using a TSM and a set of student testing devices. Prior to actual student testing (when students are logging in and taking tests), be sure to disable load simulations for the TSM by selecting Content Caching Only for the TSM Content caching functions on the Locations page of the Central Office Services - Device Toolkit (see Working with Locations in Volume III: Configuring Devices for Testing for more information).

Performing a Load Simulation

You can use the TSM and INSIGHT to perform a load simulation for as many as 100 testing devices.

Note: Before you can perform a load simulation, you must have completed the following preliminary steps:

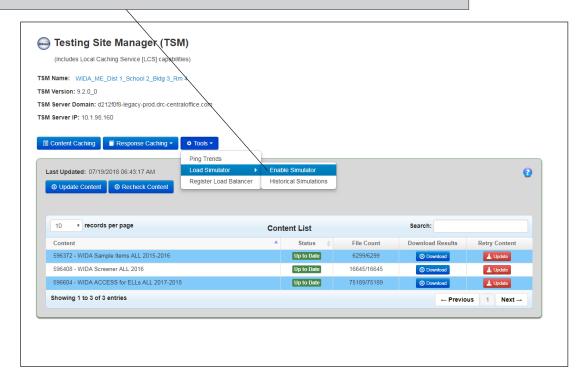
- 1. Group each device in a Central Office Services Device Toolkit configuration that specifies the location of a TSM to use for content caching (see *Volume III: Configuring Devices for Testing*).
- 2. Install INSIGHT on each device and register the device for testing with the TSM (see *Volume IV: DRC INSIGHT*).



- **1.** To perform a load simulation, on each device included in the simulation start INSIGHT. From the main INSIGHT page start the System Readiness Check by clicking the checkmark (✓) link and entering the four-digit passcode of **7745**) to display the System Information page.
- **2.** Verify that a TSM is configured correctly for content caching.
 - **Important:** If you have not configured a TSM for content caching for the configuration associated with the device, you must use the Central Office Services Device Toolkit to either reconfigure the device or move the device to a different configuration (see *Volume III: Configuring Devices for Testing*), and restart INSIGHT on the device. When you restart INSIGHT, the device's new configuration will be applied to the device.
- **4.** When you are finished, leave the System Readiness Check open. The System Readiness Check must be active on each testing computer that you plan to include in the simulation.
- **5.** Start the TSM by selecting **Start–All Programs–TestingSiteManager–TestingSiteManager**.

Performing a Load Simulation (cont.)

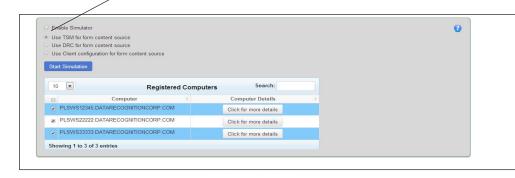
6. From the TSM, select Tools-Load Simulator-Enable Simulator.



Specify the source for the test form content as the TSM.

7. Check the **Enable Simulator** checkbox and use the radio buttons to specify the source of the form content for the simulation.

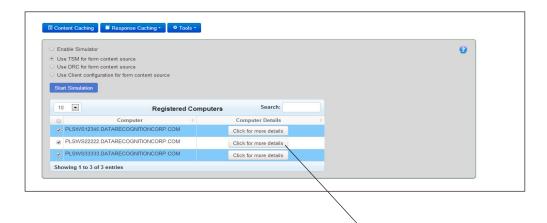
Note: This step registers the testing computer with the TSM.



The Registered Computers page displays the number and name of each testing computer registered to the TSM.

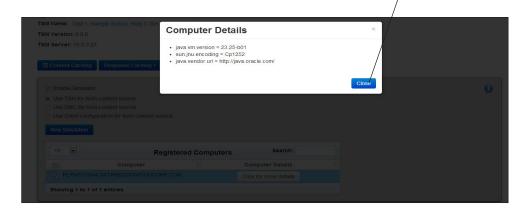
8. Select one or more computers from the Computer column to include in the simulation by clicking the checkbox next to each computer's name. Click the checkbox at the top of the column to test all of the computers.

Performing a Load Simulation (cont.)

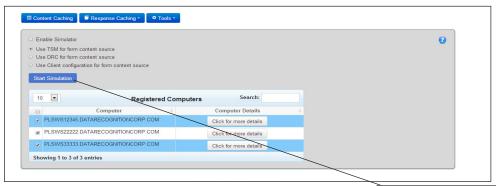


You are ready to run a simulation.

9. To locate one or more computers in the list, use the Search box. Click the **Click for more details** button to display technical details about the testing computer. Click **Close** when you are finished.



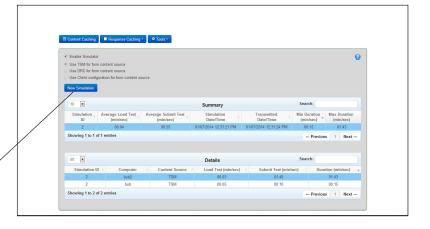
Performing a Load Simulation (cont.)



Simulation In Progress

Cancel Simulation

10. Click **Start Simulation** to start the simulation. You can click **Cancel Simulation** to cancel a simulation.



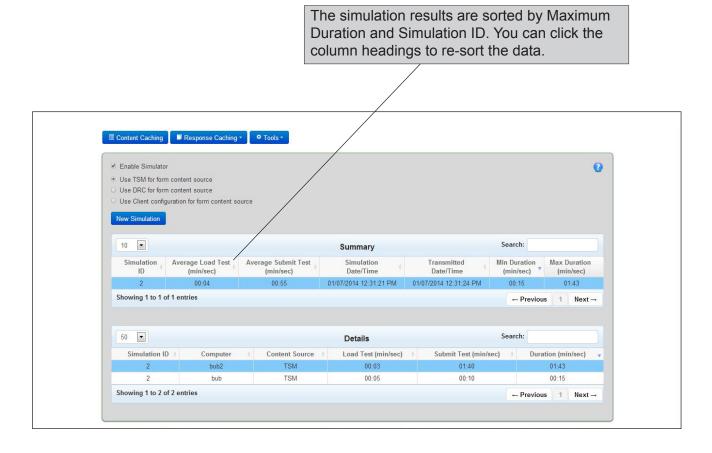
After a simulation, the Start Simulation button changes to New Simulation and each testing computer in the simulation displays a completion message.

11. To run another simulation, click the **New Simulation** button to reset it to **Start Simulation** and repeat steps 4–10. If you are finished, close the System Readiness Check on each testing computer.

Note: A simulation times out after ten minutes. The time for a simulation that lasts less than one second is rounded to one second.

Analyzing Load Simulation Results

When the load simulation finishes, the results display. For a description of the information displayed, refer to the tables on the following page.



Analyzing Load Simulation Results (cont.)

The following tables describe the information displayed from the completed simulation.

Summary

The Summary information summarizes simulation results across all of the testing computers in the simulation.

Heading	Description
Simulation ID	A system identifier for the simulation.
Average Load Test (min/sec)	The average time for the computers in the simulation to load test content.
Average Submit Test (min/sec)	The average amount of time for the computers in the simulation to submit all test responses to DRC. This time factors in the time required to submit each test response, the wait time between each test question, and the time required for the final test submission.
Simulation Date/Time	The date and time the simulation started.
Transmitted Date/Time	The date and time the simulation results were transmitted to DRC.
Min Duration (min/sec)	The time required for the fastest computer in the simulation to load the test and submit the results.
Max Duration (min/sec)	The time required for the slowest computer in the simulation to load the test and submit the results.

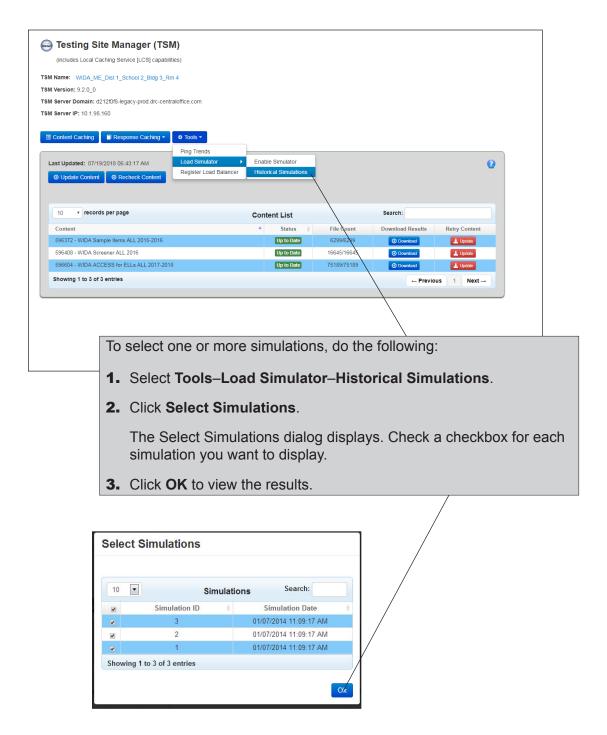
Details

The Details information shows simulation details for each testing computer in the simulation.

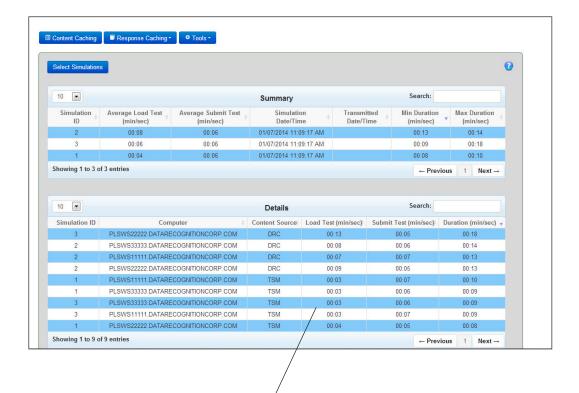
Heading	Description
Simulation ID	A system identifier for the simulation.
Computer	The unique name of each computer in the simulation.
Content Source	The source of the test content loaded to the testing computer, DRC or TSM.
Load Test (min/sec)	The time it took the testing computer to load test content.
Submit Test (min/sec)	The time it took the testing computer to submit test responses to DRC.
Duration (min/sec)	The total time it took the testing computer to load the test and submit the results.

Viewing Historical Simulation Data

Use the Historical Simulations option to view the results of one or more simulations that you select. For a description of the meaning of the information displayed, refer to the tables that follow.



Viewing Historical Simulation Data (cont.)



The results display for the simulations you selected.

4. For a description of the meaning of the information displayed, refer to the tables on the following page.

Note: The results are sorted by Maximum Duration and Simulation ID. You can click the column headings to re-sort the data.

Viewing Historical Simulation Data (cont.)

The following tables describe the simulation information that displays.

Summary (Historical)

The historical Summary information summarizes simulation results across all of the testing computers in the simulation selected.

Heading	Description
Simulation ID	A system identifier for the simulation.
Average Load Test (min/sec)	The average time for the testing computers in the simulation to load test content.
Average Submit Test (min/sec)	The average amount of time for the computers in the simulation to submit all test responses to DRC. This time factors in the time required to submit each test response, the wait time between each test question, and the time required for the final test submission.
Simulation Date/Time	The date and time the simulation started.
Transmitted Date/Time	The date and time the simulation results were transmitted to DRC.
Min Duration (min/sec)	The time required for the fastest computer in the simulation to load the test and submit the results.
Max Duration (min/sec)	The time required for the slowest computer in the simulation to load the test and submit the results.

Details (Historical)

The historical Details information shows simulation details for each testing computer in the simulation selected.

Heading	Description
Simulation ID	A system identifier for the simulation.
Computer	The unique name of each computer in the simulation.
Content Source	The source of the test content loaded to the testing computer, DRC or TSM.
Load Test (min/sec)	The time it took the testing computer to load test content.
Submit Test (min/sec)	The time it took the testing computer to submit test responses to DRC.
Duration (min/sec)	The total time it took the testing computer to load the test and submit the results.

■ Load Balancing the TSM

Prerequisites

This topic describes the process of using the Load Balancing Registration feature of the Testing Site Manager (TSM). If your site is using load balancing hardware and software, you can use this feature to register a load balancer IP address for your pool of TSM servers to help manage your workload more efficiently.

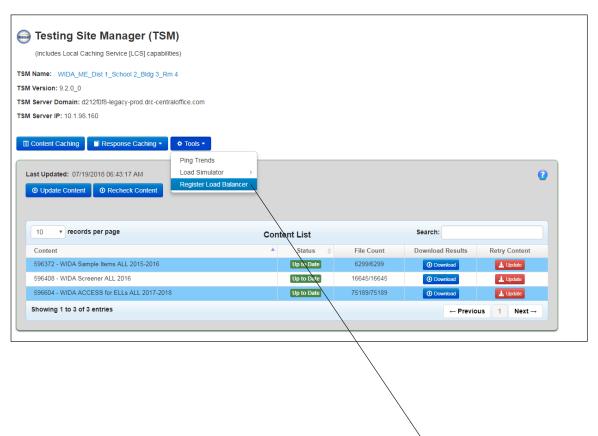
- Your site must have installed and configured your load balancing hardware and software.
- You must know the IP address of your load-balanced server pool.
- You must have installed TSM level 9.2, or higher.
- (!) Important: The TSM load balancing feature is supported for content caching only—response caching is not supported for load balancing.

Registering a TSM for Load Balancing

Use the following process to register your TSM in your load balancing pool.

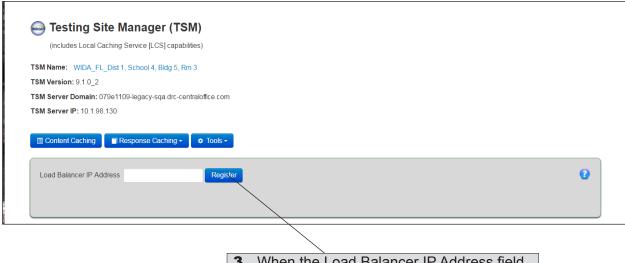
 To register a TSM for load balancing, navigate to https://<TSM domain name>:8443/ or http://<TSMip>:8080/

Where: <TSM domain name> is your TSM Server Domain name and <TSMip> is the IP address of your TSM machine.



2. When the TSM displays, select Register Load Balancer from the Tools drop-down menu.

Registering a TSM for Load Balancing (cont.)



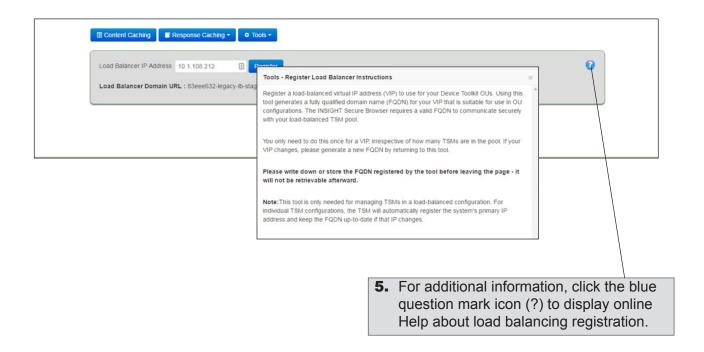
3. When the Load Balancer IP Address field displays, enter the IP address of the load balancer pool and click **Register**.



4. The system creates a Load Balancer Domain URL that you can use to register the TSM in the Central Office Services - Device Toolkit. Copy or write down the URL.

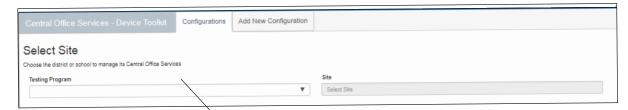
① Important: Record the Load Balancer domain URL. The Load Balancer Domain URL is not saved on the TSM page. If you lose or forget the Load Balancer Domain URL, you must repeat steps 1–4 to generate a new one.

Registering a TSM for Load Balancing (cont.)

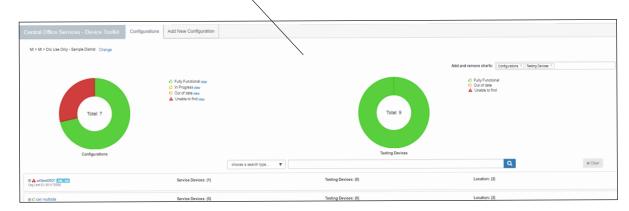




Registering a TSM for Load Balancing (cont.)



7. In the Central Office Services - Device Toolkit, specify a testing program and site (district and/or school), and select the configuration for the TSM from the dashboard (see *Volume III: Configuring Devices for Testing*).

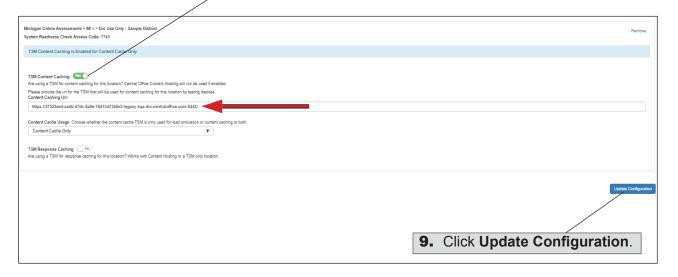


8. Select the Locations tab, toggle **TSM Content Caching** to **Yes** (if necessary), and in the Content Caching URL field enter https://, followed by the Load Balancer Domain URL, a colon (:), the port number (8443 in the example), and a forward slash (/).

See the example, but do not copy—it is an example only.

Example

https://19c3438e-legacy-lb-prod.drc-centraloffice.com:8443/



! Important: Load balancing is supported for content caching only—response caching is not supported for load balancing.

■ Updating the TSM Clock Time

Some DRC testing sites that download test content and/or software updates from Amazon CloudFrontTM have reported receiving the following Content Update Error message (see below) when installing new Testing Site Manager (TSM) software or when trying to update existing TSM software



The Issue

The Resolution

This issue can occur if your TSM cannot reach DRC's content servers. It also occurs when the local time on the TSM computer is not correct. The clock that the TSM computer is using must be set to within 30 seconds of an accurate time source, such as the time displayed at www.time.gov.

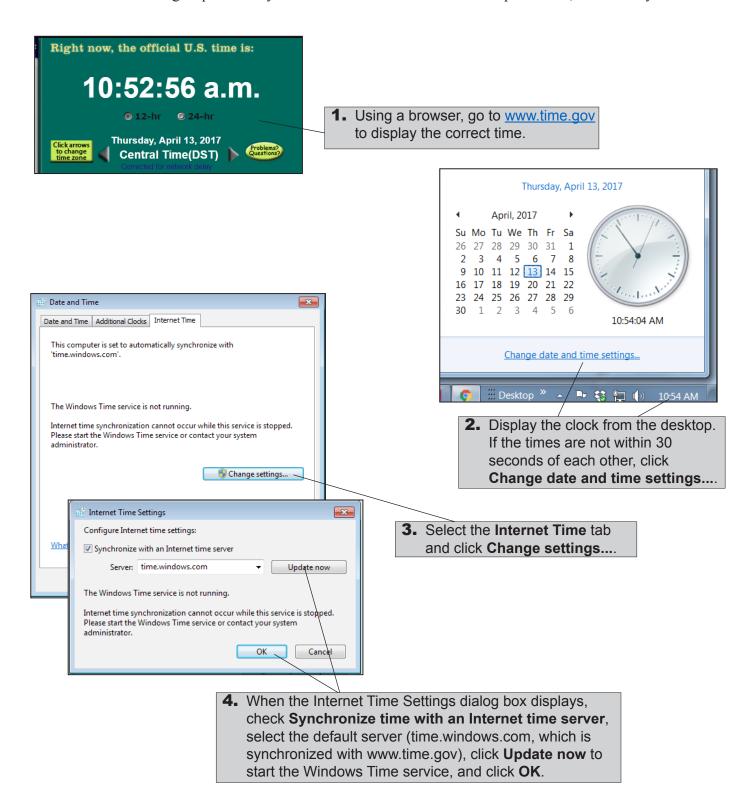
To resolve the issue, verify that you have whitelisted the correct URLs (for details, see *Volume I: Introduction to Online Testing* of the *DRC INSIGHT Technology User Guide*).

Also verify that the clock setting on the TSM computer is synchronized with the time at the www.time.gov website and reset it, if necessary. After the clock is set correctly, the TSM update content process will resume working correctly. For details about how to review and reset the time on a WindowsTM or Mac[®] computer to automatically be in synchronization with www.time.gov., see the instructions that follow.

! Important: If your site uses Active Directory™ for your Windows network and is having problems getting the clock to remain at a set time, it may be an Active Directory issue. Active Directory automatically sets the time of all of the client machines in the network. To resolve the issue, you must correct the time on the Active Directory masters and Active Directory will propagate the correct time to the other devices in the network. For more information, refer to your Active Directory documentation.

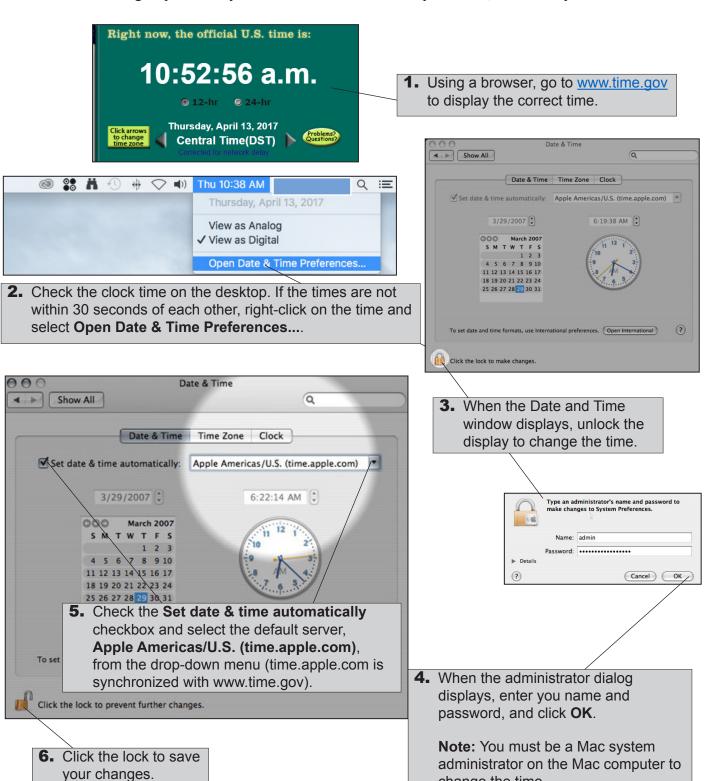
Resetting the Time on a Windows 7 TSM Computer

Perform the following steps to verify and reset the TSM Windows 7 computer time, if necessary.



Resetting the Time on a Mac (OS X and macOS) TSM Computer

Perform the following steps to verify and reset the TSM Mac computer time, if necessary.



change the time.

Volume III: Configuring Devices for Testing

Introduction

■ About This Guide

Important Information

■ COS - Device Toolkit Overview This user guide is part of a multi-volume set that describes how to configure, install, manage, and troubleshoot the DRC INSIGHT Online Learning System, or DRC INSIGHT. This volume, *Volume III: Configuring Devices for Testing*, provides detailed information about configuring devices using the Central Office Services - Device Toolkit (referred to as the COS - Device Toolkit in this user guide). It describes the COS - Device Toolkit and the role it plays in configuring devices for testing. It describes the various tasks you can perform using the COS - Device Toolkit, including how to organize, configure, and manage your testing devices for testing with DRC INSIGHT.

① **Important:** Throughout this user guide, the Important icon (①) indicates important information or crucial tips.

You use the COS - Device Toolkit to organize, configure, and manage your testing devices. Within the COS - Device Toolkit, you create configurations, a logical grouping of devices usually consisting of one or more Testing Site Managers (TSMs) and multiple testing devices. A configuration allows you to group testing devices and TSMs and easily specify settings for all the devices in the configuration.

Each testing device can belong to only one configuration. The COS - Device Toolkit tracks and manages the testing devices within the configuration by using a unique DRC Device ID that the COS - Device Toolkit creates. You can use the COS - Device Toolkit to move a testing device from one configuration to another or to delete a testing device from the COS - Device Toolkit.

In addition to testing devices, you can configure TSMs as part of a configuration for content caching and/or response caching. You also can specify a load simulation server, the port used for communication, the location of a proxy host, and indicate whether to turn automatic software updates for DRC INSIGHT software off or on.

Introduction

■ COS - Device Toolkit Overview (cont.)

Central Office Services Software

COS Icon

After you have installed your TSMs, you use the COS - Device Toolkit to perform the following tasks:

- 1. Set up configurations.
- 2. Associate TSMs with configurations.
- **3.** Organize testing devices by configuration.
- **4.** Deploy configurations to testing devices.
- **5.** Register the testing device with a configuration after you install and start INSIGHT on the testing device.

The COS - Device Toolkit integrates the new Central Office Services interface with the legacy Device Toolkit as part of the transition from the legacy Device Toolkit and TSM software to the complete Central Office Services software

(!) Important: Current Device Toolkit users will notice some differences in the COS - Device Toolkit interface, but there is no need to install additional software or make changes to your existing configurations to transition to this interface. The new interface is available when you click Device Toolkit in the DRC INSIGHT Portal.

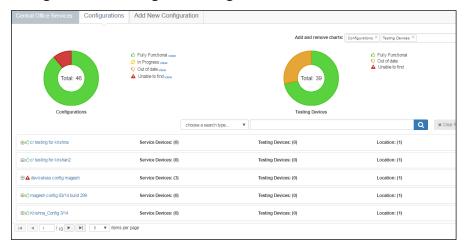
Central Office Services: At various locations throughout this volume, the COS icon is displayed. It indicates functionality that is part of the Central Office Services interface but is unavailable for the COS - Device Toolkit interface, either because it requires the Central Office Services software to be installed or because it is not compatible with TSM software.

The Central Office Services - Device Toolkit Dashboard

Introduction

The COS - Device Toolkit interface consists of two tabs—Configurations and Add New Configuration.

• The Configurations tab displays a visual dashboard describing the configurations that currently exist in the COS - Device Toolkit, status information about each configuration, and the testing devices associated with each configuration. From this tab, you can drill down into a configuration to manage the configuration and its associated devices.



• The Add New Configuration tab helps you quickly create a new configuration.



This section describes the COS - Device Toolkit dashboard that appears in the Configurations tab. Using the dashboard, you can review, monitor, and manage your configurations, TSMs, and testing devices from a central location.

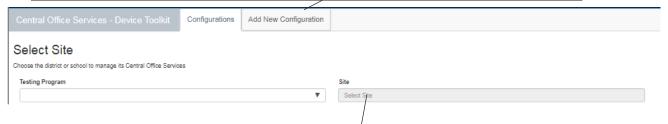
From the Configurations tab, select a testing program and a site from the drop-down menus to display the COS - Device Toolkit dashboard. When the dashboard first appears, two "donut" charts—Configurations and Testing Devices—display at the top. A third chart, TSM Devices, is also available. You can toggle the dashboard to display any combination of these charts (a fourth chart, Service Devices, is also available for COS configurations, see Central Office Services below).

Central Office Services: Service Device functionality is part of the Central Office Services interface and is unavailable for the COS - Device Toolkit. In some locations within the interface, TSM options replace Service Device options.

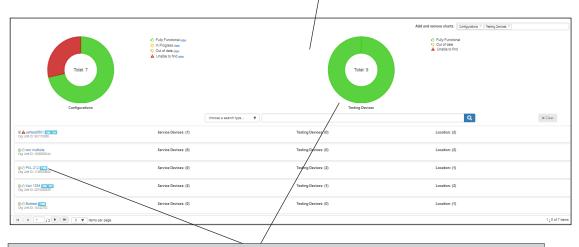


 To start the COS - Device Toolkit and display its dashboard, sign on to the DRC INSIGHT Portal, open the All Applications menu, and click Device Toolkit.

Note: You must have the Device Toolkit permission in the WIDA Assessment Management System (WIDA AMS) to have access to this link.



2. From the Configurations tab, when you select a testing program from the drop-down menu, and search for and select a site (district or school) in the Site field by typing three or more letters of the site's name, the COS - Device Toolkit dashboard displays the configurations and testing devices that you can access.



The **Add and remove charts** tabs indicate the graphical donut charts currently displayed in the dashboard. The default is to display the Configurations and Testing Devices charts. Your configurations are listed below the donut charts, and you can click a configuration name to view or manage the configuration.

Within a donut chart, you can hover your mouse over a color to display the number of configurations or devices that have a particular status. Clicking the text in the legend to the right of a donut chart displays a definition of the status. The grids below list the colors and corresponding icons that appear in each legend (and elsewhere in the dashboard). They also list the corresponding status and provide a brief description of each status.

Note: The statuses for the Configurations chart are different from the statuses for the Testing Devices chart.

Configurations Chart				
Chart Color	Icon	Configuration Status	Description	
Green	Ô	Fully Functional	All TSM and testing devices using a configuration are visible to the COS - Device Toolkit and are either in use or ready for use.	
Orange	0	Out of date	NA	
Yellow	C	In Progress	NA	
Red	A	Unable to find	Configured services have not been seen for at least an hour.	

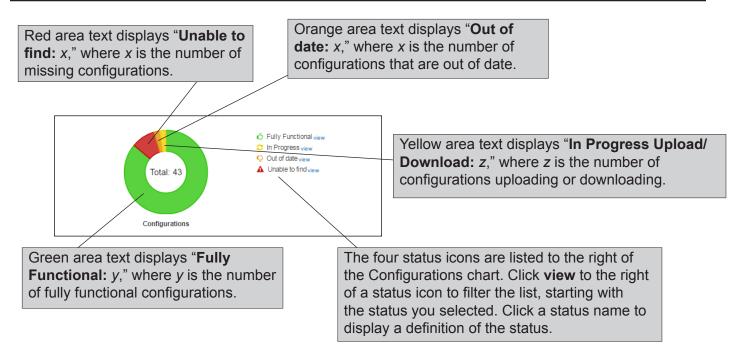
Central Office Services: The In Progress and Out of date status icons do not apply to configurations that use a TSM in the COS - Device Toolkit. To determine the status of a TSM, refer to the TSM interface information (see *Volume II: Testing Site Manager [TSM]*).

Testing Devices Chart				
Chart Color	Icon	Testing Device Status	Description	
Green	O	Fully Functional	Testing device last seen within a month	
Red	A	Unable to find	Testing device has not been seen for at least a year.	
Orange	\bar{V}	Out of date	Testing device has not been seen for at least a month	

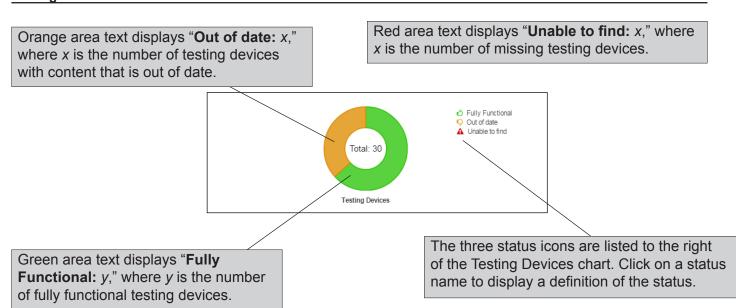
When you hover over a color in a donut chart, informational text appears based on the color of the chart.

Central Office Services: The In Progress and Out of Date status icons will not appear in configurations that use a TSM in the COS - Device Toolkit. To determine the status of a TSM, refer to the TSM interface information (see *Volume II: Testing Site Manager [TSM]*).

Configurations Chart



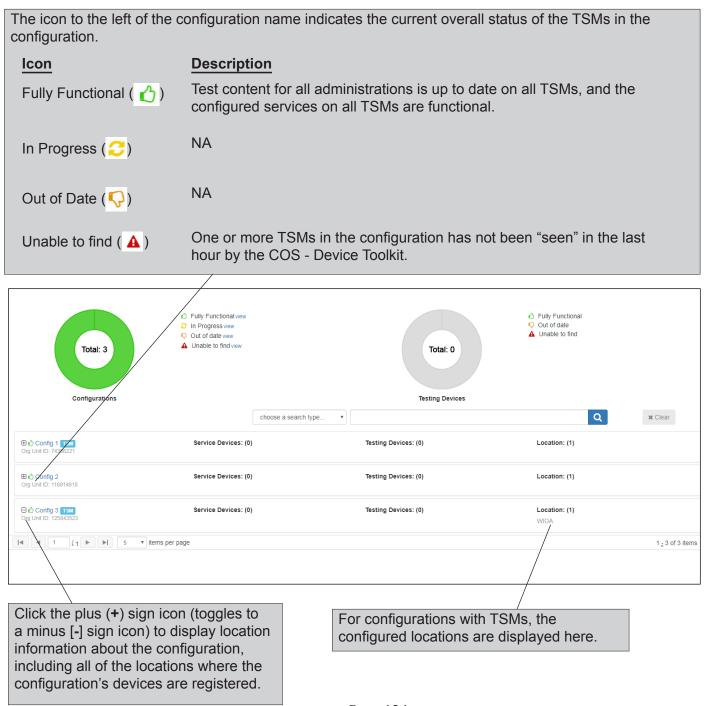
Testing Devices Chart

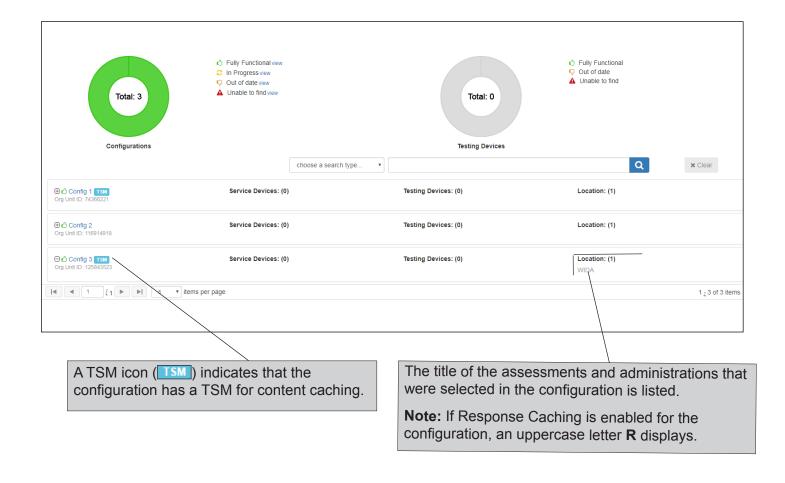


The Configurations tab displays all the configurations that match your search criteria. When you click the plus sign icon (+), the locations where the configuration and associated devices are registered are also displayed.

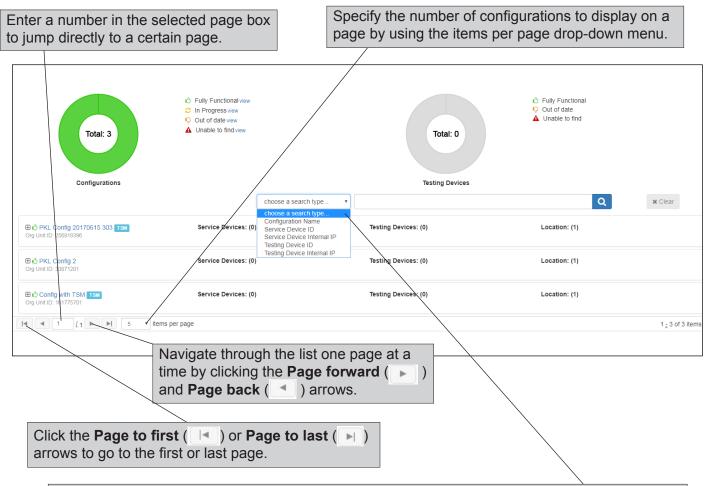
Note: The new ORG Unit ID is always displayed.

Central Office Services: The In Progress and Out of Date status icons do not apply to configurations that use a TSM in the COS - Device Toolkit. To determine the status of a TSM, refer to the TSM interface information (see *Volume II: Testing Site Manager [TSM]*).





When there are more configurations than can be shown on a single page, the COS - Device Toolkit allows you to page through the configurations. There are multiple ways to navigate the dashboard configuration pages, as shown below.

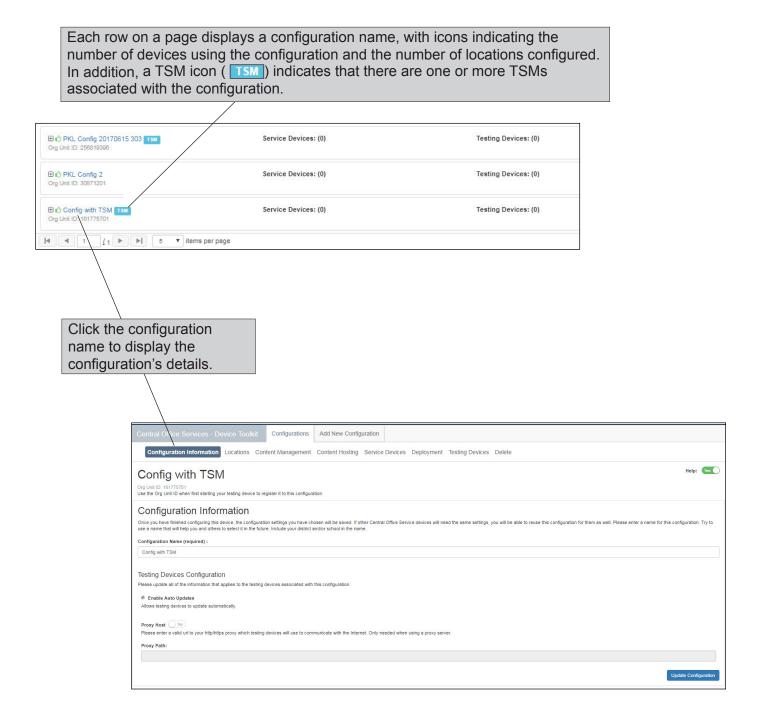


To refine your search criteria, choose a search type—Configuration Name, Service Device ID, Service Device Internal IP, Testing Device ID, or Testing Device IP Address—enter your search values, and click the Search icon (). You can click **Clear** at any time to clear your search results and return to the original display.

Notes:

- The search values you enter for a Configuration Name search do not have to be the first values in the string for which you are searching. The search locates any string in the search type that contains the search values you specified.
- The minimum number of characters you must enter varies by search type and a reminder is displayed, if necessary, when you search.

Central Office Services: The Service Device ID and Service Device Internal IP filters do not apply to configurations that use a TSM in the COS - Device Toolkit.



Overview of Configuring INSIGHT

The process of configuring INSIGHT on testing devices consists of two main parts:

- 1. Create or modify configurations using the COS Device Toolkit and, if needed, move one or more testing devices to them.
 - **! Important:** You can use COS Device Toolkit configurations for a combination of testing devices.
- 2. For silent installations, you can create a compressed deployment file (.zip) using the COS Device Toolkit, download it, and use it to deploy INSIGHT to the testing devices that you configured. Alternatively, you can launch INSIGHT on a testing device and manually link it to a configuration.

Web Browsers and the COS - Device Toolkit The COS - Device Toolkit is available from the WIDA AMS and is supported for the following web-browser versions.

Browser Version

Internet Explorer Version 10 or newer

Chrome The most recent Google Chrome stable channel release

Mozilla Firefox Version 31 or newer

COS - Device Toolkit Deployment Files and Silent Installation You can use the COS - Device Toolkit to create a deployment file (.zip) containing configuration information for each testing device type (see the following page). To install INSIGHT on your testing devices silently, download the deployment file, extract the specific file(s) you need to install INSIGHT based on the type of testing devices you configured, and deploy the file(s) to these testing devices.

Note: As shown in the example below, silent installation commands are also available for Windows, Linux, and Mac (OS X and macOS) in the file named desktop.txt that is part of the configuration deployment file (.zip). If you plan to use the Linux or Mac versions, please contact DRC Customer Support.

Desktop Silent Install Commands

Linux

sudo sh ./silent installer.sh -o "161775701"

Windows

msiexec.exe /i DRC_INSIGHT_Setup.msi /qn /lv "install.log" HTTPS_PROXY="" OU IDS="161775701"

Mac OS X

sudo ./drc_silent_install -o 161775701 -x ""

Example Deployment File Templates

① Important: The code in the deployment files is meant as a rough template only. Depending on your Mobile Device Management (MDM) software, your configuration could be very different (see *Volume IV: DRC INSIGHT* for more information about the deployment files).

Chromeos.json

Contains configuration information for Chromebook testing devices (see the example below)

{"ouIds": {"Value": ["161775701"]}}

DRCConfiguration.json

Contains configuration information for Windows, Mac, and Linux machines (see the example below)

```
{ "config": { "httpsProxy": "" }, "ouIds": [ "161775701" ]}
```

ios.plist

Contains a silent installation command for iPad testing devices (see the example below)

Setting Up INSIGHT on PCs, Mac, and Linux Testing Devices

Setting Up INSIGHT on iPad Testing Devices The following steps describe the process of configuring, installing, deploying, and registering INSIGHT on PCs, Mac (OS X and macOS), and Linux testing devices.

- 1. Use the COS Device Toolkit to create configurations and deployment files and organize your testing devices in the configurations.
- **2.** Use a silent installation (many testing devices) or an interactive installation (one testing device) to install INSIGHT on one or more machines.
- **3.** If you installed INSIGHT interactively, start INSIGHT and enter the COS Device Toolkit ORG Unit ID to register the testing device. If you installed INSIGHT using a silent installation, when you start INSIGHT, the testing device is registered automatically.

The following steps describe the process of configuring, installing, deploying, and registering INSIGHT on iPad testing devices.

- 1. Use the COS Device Toolkit to create configurations and deployment files and organize your testing devices in the configurations.
- **2.** Use an MDM solution to install INSIGHT on each testing device. To *deploy and register* your DRC INSIGHT iPad software automatically, your MDM software must support the Managed App Configuration feature (first introduced in iOS 7).
- **3.** If you installed and registered INSIGHT using an MDM solution, when you start INSIGHT, the iPad testing device is registered automatically. If you installed INSIGHT using an MDM without the Managed App Configuration feature, start INSIGHT and enter the COS Device Toolkit ORG Unit ID to register the testing device with the configuration.

Setting Up INSIGHT on Chromebook Testing Devices The following steps describe the process of configuring, installing, deploying, and registering INSIGHT on Chromebook testing devices. This overview assumes that you have registered your Chromebook testing devices in your Google domain account (for more information, see https://support.google.com/a/answer/182433).

- 1. Use the COS Device Toolkit to create configurations and deployment files and organize your testing devices in the configurations.
- 2. Use Chrome device management to install and deploy INSIGHT and the deployment files to your Chromebook testing devices. The INSIGHT App is installed as a Kiosk application the next time the policy is reloaded, which takes place once every three hours. To deploy the INSIGHT App immediately, enter chrome://policy in the address bar of the Chromebook and click Reload policies.
- **3.** After INSIGHT is deployed, without logging into your Chromebook, start it on each Chromebook testing device to register the testing device with the configuration.

Configuring and Installing INSIGHT with a TSM

The following steps describe the process of configuring a testing device and installing INSIGHT with a TSM.

- 1. Install one or more TSMs on desktop or laptop computers that have static IP addresses and will be available around the clock.
- 2. Sign on to the WIDA AMS using a supported browser (see "Web Browsers and the COS Device Toolkit" on page 129) and click **Device Toolkit** to start the COS Device Toolkit.
- **3.** Use the COS Device Toolkit to organize and configure your testing devices by performing the following tasks:
 - Create configurations based on your testing setup and needs, group the testing devices into configurations, and specify the testing program, district or school, and TSM connection information for the testing devices in the configuration.
 - Check the contents of the log files during testing to monitor testing and testing device activity and make any configuration changes.
- **4.** Install the INSIGHT App on your testing devices and launch INSIGHT to register the testing device.
- 5. Run the System Readiness Check to verify that the testing device can connect to the TSM and is ready for testing. If necessary, use the COS Device Toolkit to reconfigure the testing device configuration and redeploy the configuration software.
- **6.** Test your configurations and monitor the log files for issues.

Because of the role that the TSM plays in testing, there are some special considerations regarding TSM software configuration and installation.

- Install TSMs *before* you install INSIGHT, and specify the path to the TSMs and the communication port using the COS Device Toolkit.
- The computer on which you install the TSM software should have a static IP address (an IP address that does not change when the computer is restarted or rebooted). If the IP address of the TSM changes, INSIGHT automatically updates the configurations of the testing devices and the TSM so that the testing devices will point to the correct TSM. However, the TSM server must be restarted for the change to take effect.
- To change or remove a TSM configuration after a testing device is configured, use the Locations page of the COS Device Toolkit. When you restart INSIGHT, it automatically updates the testing device's configuration to reflect your changes.

TSM Considerations

Installing Multiple TSMs and INSIGHT

If you plan to use the same testing computers for multiple types of testing programs, you may need to install more than one TSM.

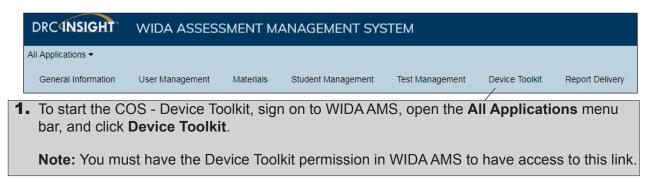
- You cannot install more than one TSM on the same computer—each TSM must be installed on a dedicated computer.
- You can use INSIGHT to access multiple testing programs (for example, ACCESS for ELLs 2.0 and your state-specific testing program) from the same testing device. You access these testing programs using the same DRC INSIGHT desktop shortcut. When you start INSIGHT, a page appears listing the different testing programs from which you can select.

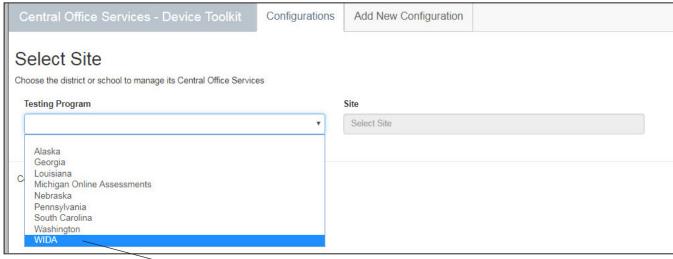
Note: If you plan to test using INSIGHT and multiple TSMs, you could label your WIDA configurations WIDA TSM1, WIDA TSM2, and so forth. Then, name the corresponding TSMs as WIDA TSM1, WIDA TSM2, and so forth. This labeling strategy helps keep track of your TSM resources.

• You can install a TSM and INSIGHT on the same computer. If you plan to perform multiple types of assessments using the same testing computers, you may need to install more than one TSM and use INSIGHT to access more than one testing program.

Starting the COS - Device Toolkit and Displaying a Configuration

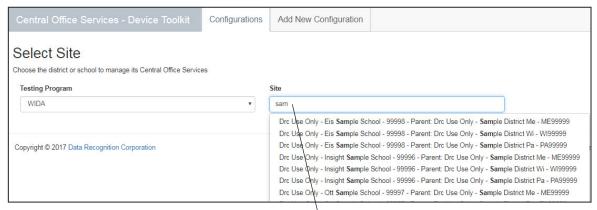
To start working with the COS - Device Toolkit, click **Device Toolkit** in the DRC INSIGHT Portal.





2. When the Select Site page appears, select a testing program from the Testing Program drop-down menu.

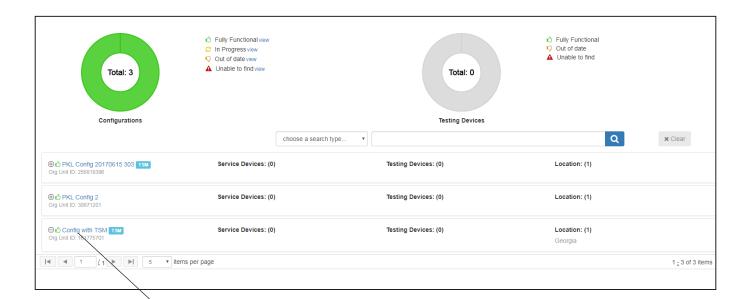
Note: You see only the clients you can access.



3. Select a site (district or school) from the Site field by typing three or more letters of the site's name.

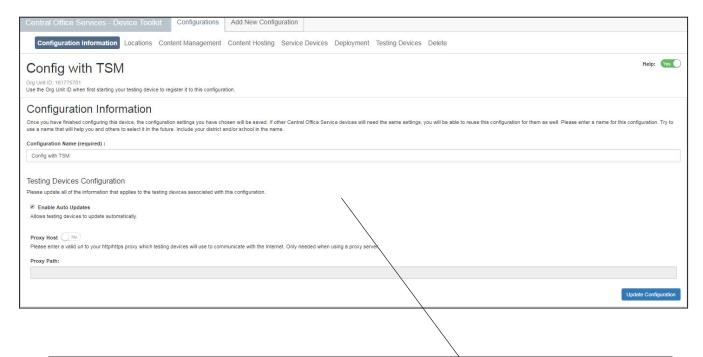
Note: You see only the schools and/or districts that you can access.

Starting the COS - Device Toolkit and Displaying a Configuration (cont.)



4. The COS - Device Toolkit dashboard appears for the site you selected. You can display a configuration by clicking the configuration name. To change testing programs or sites, click **Change** at the top of the page to re-display the Select Site page.

Starting the COS - Device Toolkit and Displaying a Configuration (cont.)



The Configuration Information page for the configuration you selected appears. From this page, you can locate the ORG Unit ID for the configuration, change the name of the configuration, enable or disable automatic updates of the DRC INSIGHT testing software, and specify a proxy host.

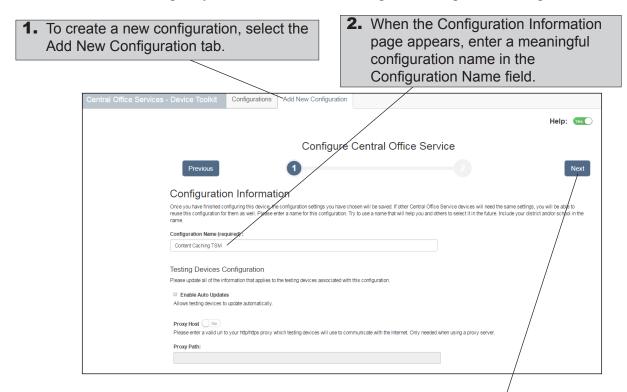
From the other configuration pages, listed across the top of the configuration, you can perform the following tasks:

- Add locations to, or remove locations from, the configuration
- Specify a TSM to use for content caching and/or load simulation, and a TSM to use for response caching
- Create and/or download a configuration deployment file
- · Add, move, or remove testing devices
- · View the configuration log files
- Delete the configuration

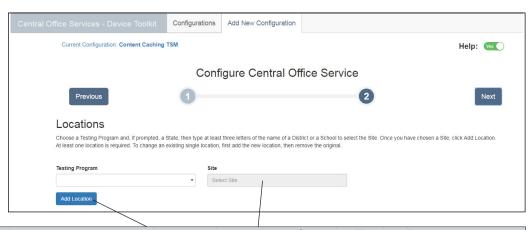
Central Office Services: Various COS - Device Toolkit pages are in place for the Central Office Services implementation and are not functional when you use a TSM in a configuration. These pages are indicated in this volume by the COS icon.

Creating Configurations

If you want to set up testing devices for testing, you can create a configuration using the Add New Configuration tab. You also can specify a TSM for content caching and/or response caching.



3. Select the appropriate options from the Testing Devices Configuration section of the Configuration Information page. For details about the other options, see "Working with Configuration Information" on page 142. When you are ready, click **Next**.



4. When the Locations page appears, select a testing program from the Testing Program drop-down menu. Then, start typing a district name, school name, or site code in the Site field. When you locate the district or school name to which you want to register the configuration and its associated service devices and testing devices, click **Add Location**.

Note: You can select more than one location if you test with multiple testing programs (see "Working with Locations" on page 143).

Creating Configurations (cont.)

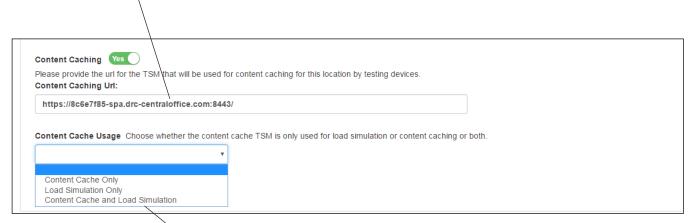
5. You can specify content caching for any location that you choose. To specify content caching, toggle the Content Caching option to **Yes** and enter or paste the TSM server domain name* (from the TSM) for the content caching TSM, prefixed with https:// and followed by a colon, the port number, and a forward slash (/), in the Content Caching URL field in the screenshot below.

An example of the correct format is shown below. Do not use the example; it is an example only.

Example

https://37525ee4-aa4b-47dc-8a9e-19413d7348e5-legacy-sqa.drc-centraloffice.com:8443/

Note: The response caching and content caching TSM can be the same machine.



- **6.** Use the Content Cache Usage drop-down menu options to indicate the functions for which the TSM will be used:
 - Content Cache only
 - Load Simulation only
 - Content Cache and Load Simulation

! Important: *Starting with version 9.0.1_0, the TSM includes a TSM server domain name. (If you did not save this information when you installed the TSM, you can retrieve it by starting the TSM.) Upon startup, the TSM sends its IP address to the registration API for DNS resolution.

If the IP address of the TSM changes, INSIGHT automatically updates the configurations of the testing devices and the TSM so that the testing devices will point to the correct TSM. However, the TSM server must be restarted for the change to take effect. In general, a TSM server should have a static IP address (an IP address that does not change when the computer is restarted or rebooted).

Remember to include the forward slash (/) at the end of the path to the TSM server—without it, your TSM will not be configured correctly.

Creating Configurations (cont.)

7. You also can specify response caching for any location that you choose. To specify response caching, toggle the TSM Response Caching option to **Yes** and enter or paste the TSM server domain name* (from the TSM), prefixed with https:// and followed by a colon, the port number, and a forward slash (/), in the field below.

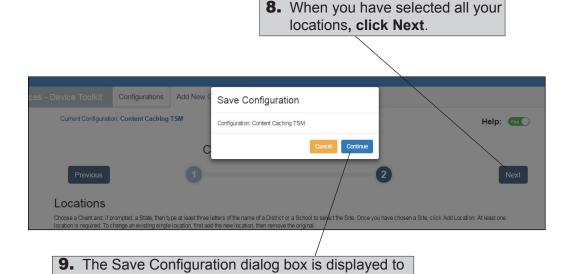
An example of the correct format is shown below. Do not use the example; it is an example only.

Example

https://37525ee4-aa4b-47dc-8a9e-19413d7348e5-legacy-sqa.drc-centraloffice.com:8443/

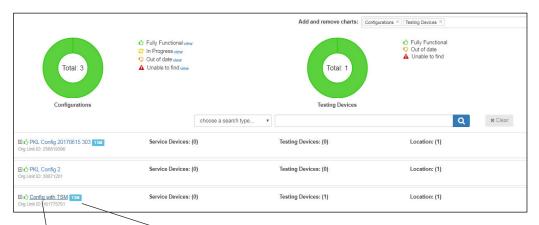
Note: The response caching and content caching TSM can be the same machine.





confirm your choice. Click **Continue** to create the configuration (or **Cancel** to cancel the process).

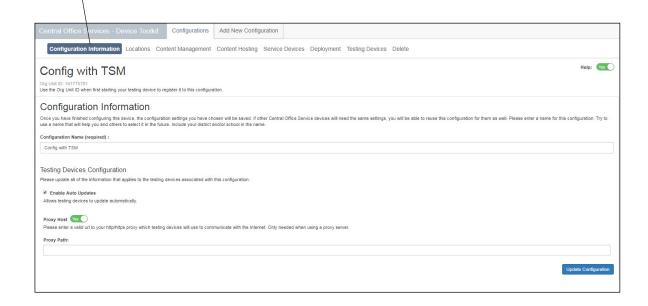
Creating Configurations (cont.)



10. If you click **Continue**, the Configuration Information page displays your new configuration. You can link testing devices to this configuration, and students will be able to test.

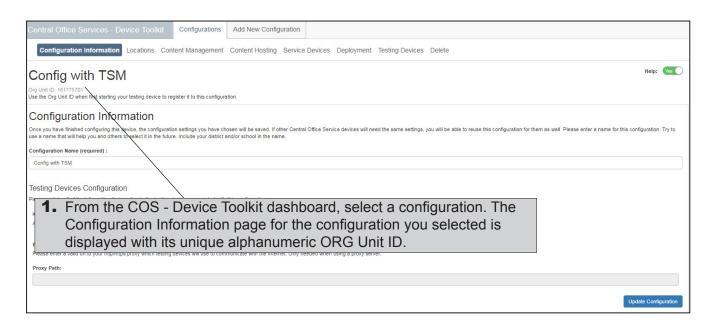
Note: The TSM icon (TSM) indicates that a content caching TSM is associated with this configuration.

11. You can click the configuration name to drill down and review or edit the configuration.

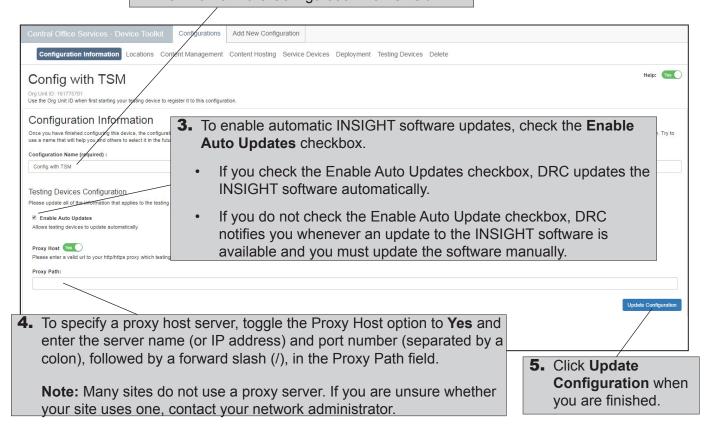


Working with Configuration Information

This section describes how you can use the COS - Device Toolkit Configuration Information page to rename a configuration, turn automatic INSIGHT software updates off or on, and specify a proxy host server.



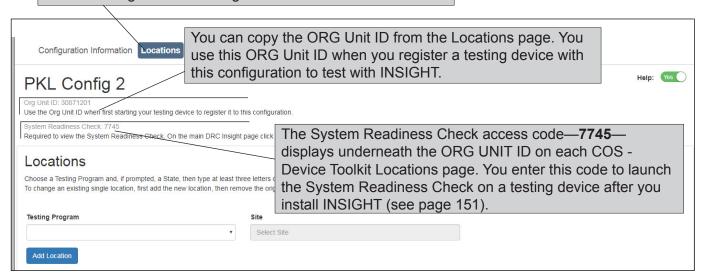
2. You can rename the configuration by entering a new name in the Configuration Name field.



Working with Locations

Use the COS - Device Toolkit Locations page to view, add, or remove locations where testing devices are registered and to add or remove response caching and/or content caching for a location. You can use the Locations page to specify multiple locations for testing devices that are used for different testing programs, such as ACCESS for ELLs 2.0 and your state testing program.

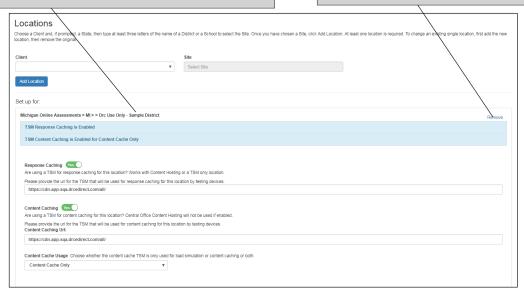
1. From the Configurations tab, select **Locations** to display the Locations page. This page shows the location(s) where the testing devices are registered.



2. To add a location, select it using the Testing Program menu and Site field and click **Add Location**.

Note: You can use the Locations page to specify multiple locations for testing devices that are used for different testing programs, such as ACCESS for ELLs 2.0 and your state testing program. In this case, each testing program must have unique TSM settings.

3. The Locations page reappears with the location added. To remove a location, click **Remove**.



Working with Locations (cont.)

! Important: *Starting with version 9.0.1_0, the TSM includes a TSM server domain name (If you did not save this information when you installed the TSM, you can retrieve it by starting the TSM.) Upon startup, the TSM sends its IP address to the registration API for DNS resolution.

If the IP address of the TSM changes, INSIGHT automatically updates the configurations of the testing devices and the TSM so that the testing devices will point to the correct TSM. However, the TSM server must be restarted for the change to take effect. In general, a TSM server should have a static IP address (an IP address that does not change when the computer is restarted or rebooted).

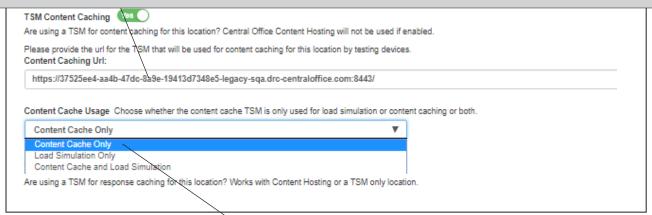
Remember to include the forward slash (/) at the end of the path to the TSM server—without it, your TSM will not be configured correctly.

4. You can specify content caching for any location that you choose. To specify content caching, toggle the Content Caching option to **Yes** and enter or paste the TSM server domain name* (from the TSM) for the content caching TSM, prefixed with https:// and followed by a colon, the port number, and a forward slash (/), in the Content Caching URL field in the screenshot below. An example of the correct format is shown below. Do not use the example; it is an example only.

Example

https://37525ee4-aa4b-47dc-8a9e-19413d7348e5-legacy-sqa.drc-centraloffice.com:8443/

Note: The response caching and content caching TSM can be the same machine.



- **5.** Use the Content Cache Usage drop-down menu options to indicate the functions for which the TSM will be used:
 - · Content Cache Only
 - · Load Simulation Only
 - · Content Cache and Load Simulation
- ! Important: Select Load Simulation Only or Content Cache and Load Simulation only when you are actually conducting a load simulation test using a TSM and a set of student testing devices. Prior to actual student testing (when students are logging in and taking tests), be sure to disable load simulations for the TSM by selecting Content Cache Only.

Working with Locations (cont.)

6. You also can specify response caching for any location that you choose. To specify response caching, toggle the TSM Response Caching option to **Yes** and enter or paste the TSM server domain name* (from the TSM), prefixed with https:// and followed by a colon, the port number, and a forward slash (/), in the field below.

An example of the correct format is shown below. Do not use the example; it is an example only.

Example

https://37525ee4-aa4b-47dc-8a9e-19413d7348e5-legacy-sqa.drc-centraloffice.com:8443/

Note: The response caching and content caching TSM can be the same machine.

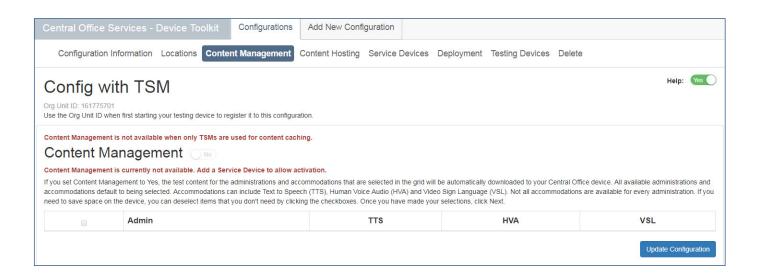


7. When you are finished making updates, click **Update Configuration**. A message appears to confirm that the configuration was updated.

Working with Content Management

Use the Content Management page to enable or disable Content Management and change the selected administrations and accommodations.

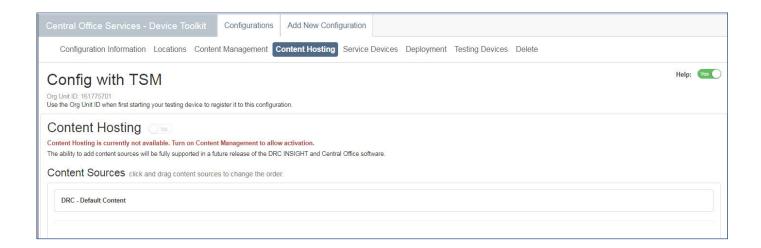
Central Office Services: The Content Management functionality is part of the Central Office Services interface but is unavailable for the COS - Device Toolkit.



Working with Content Hosting

Use the Content Hosting page to enable or disable Content Hosting, and to update, add, or change the order of or remove the content sources.

Central Office Services: The Content Hosting functionality is part of the Central Office Services interface but is unavailable for the COS - Device Toolkit.



Working with Service Devices

Use the **Service Devices** page to view the current status of the service device(s) associated with the configuration and to add service devices to, or remove them from, a configuration.

Central Office Services: The Service Device functionality is part of the Central Office Services interface but is unavailable for the COS - Device Toolkit.



Configuring Devices for Testing

Creating Configuration Files for Multiple Testing Programs You can use one testing device for more than one type of testing program (for example, ACCESS for ELLs 2.0 and your state-specific testing program). The following is a brief overview of this process, which is detailed further in "Creating a Deployment File for Testing Devices" on page 151.

- 1. First, select the **Device Toolkit** from WIDA AMS and use the COS Device Toolkit to create a configuration containing both of the testing programs as locations for testing.
- 2. Next, deploy the configuration to the testing device. When a user starts INSIGHT on the testing device, the user can select from the testing programs located in the configuration (see the generic example below).

Select a testing program:
Testing Program A
Testing Program B

Configuring Devices for Testing

Deployment Files, Configurations, and the TSM

Each TSM you use must be identified in the COS - Device Toolkit.

(!) Important: To prevent potential issues and avoid overloading a TSM during testing, DRC recommends that each configuration should be configured to use a unique TSM (see the scenario below).

Scenario: Potential TSM Overload

Even if you limit the number of testing devices per configuration, the possibility exists to overload the TSM by stacking configurations.

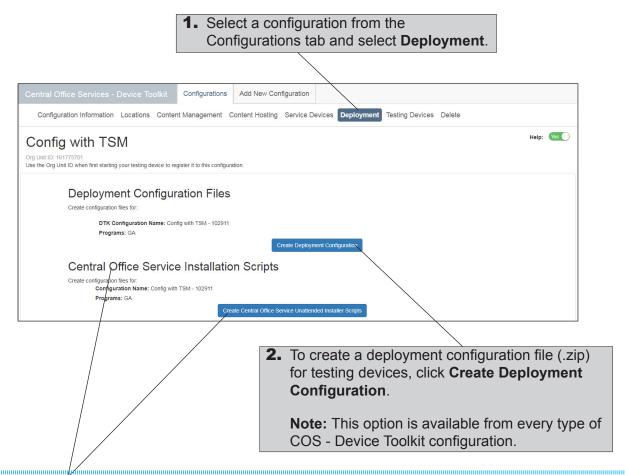
Assume the following:

- 1. You configure configuration A with a TSM for testing, create a deployment file, and use this configuration for one group of testing devices.
- 2. You configure configuration B with the same TSM, create a deployment file, and use this configuration for a different set of testing devices.
- **3.** You use both configurations to perform testing.

The potential may exist for too many testing devices to simultaneously access the same TSM, which could overload the TSM. For details regarding the number of concurrent testers and system requirements, refer to the latest version of the *Supported System Requirements for ACCESS for ELLs 2.0 and Screener*.

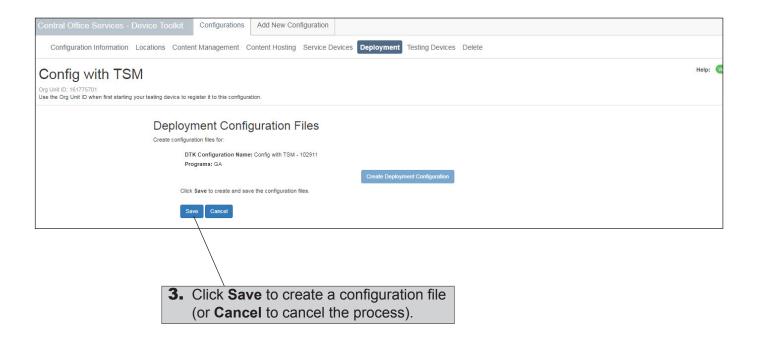
Creating Deployment Files for Testing Devices

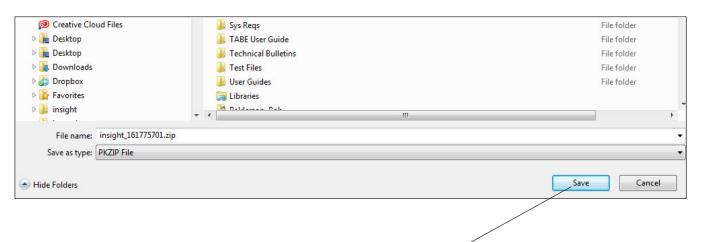
You can use the COS - Device Toolkit to create a deployment file for testing devices using an existing configuration. You use this file to configure your testing devices when you install INSIGHT silently (non-interactively or in batch mode). You also can use the COS - Device Toolkit to create unattended installer scripts to install DRC INSIGHT silently (non-interactively).



Central Office Services: The Central Office Service Installation Scripts section of the page and the associated Create Central Office Service Unattended Installer Scripts button are not part of the COS - Device Toolkit.

Creating Deployment Files for Testing Devices (cont.)





4. When you click **Save**, a box appears that allows you to specify where to download the deployment configuration file (.zip).

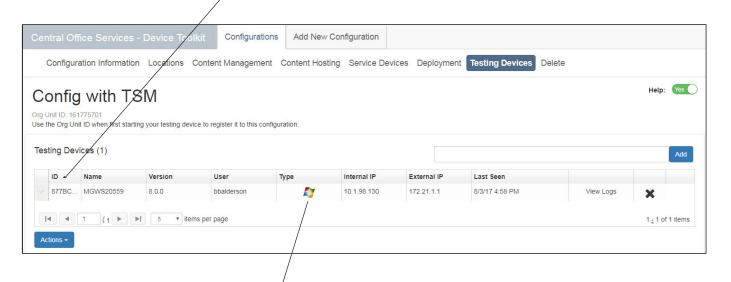
For a description of the files contained in this file, see "COS - Device Toolkit Deployment Files and Silent Installation" on page 129 and "Example Deployment File Templates" on page 130.

For more information about deployment files, see Volume IV: DRC INSIGHT.

Working with Testing Devices

Select a configuration from the Configurations tab and select **Testing Devices** to view the list of testing devices that are currently part of the configuration. You can sort the list using certain column headings. You also can move testing devices, remove testing devices, and reload (refresh) the display. In addition, you can edit the configuration by adding testing devices, and you can view the log files for a testing device.

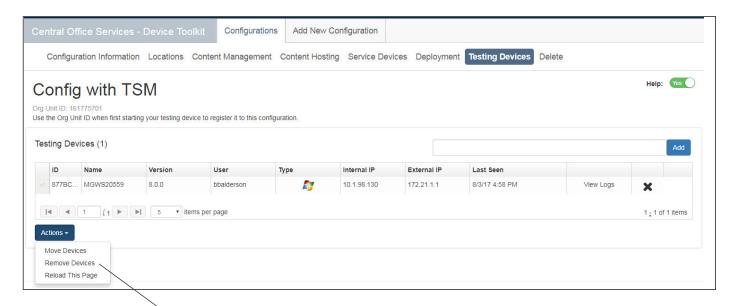
You can sort the list of testing devices in a configuration by clicking the following column headings: **ID** (Device ID), **Internal IP**, **External IP**, and **Last Seen**. When you click the heading, an up () or down () arrow appears in the column heading, indicating whether the sort is in ascending (up arrow) or descending (down arrow) order. Click the header again to change the sort order.



Field	Description	
ID	The unique alphanumeric Device ID that Central Office created for the testing device	
Туре	An icon representing the testing device type. The icons and their respective testing device type or operating system are shown below. Icon Testing Device Type	
	Chromebook device iPad Linux Mac (OS X and macOS) Windows	
IP	The internal IP address of the testing device	
Last Seen	The date and time (Central Time) the testing device was last used for INSIGHT testing	
X	The remove testing device option (Click the x to remove the testing device from the configuration. A dialog box is displayed that confirms the removal.)	

Moving, Removing, and Reloading Testing Devices

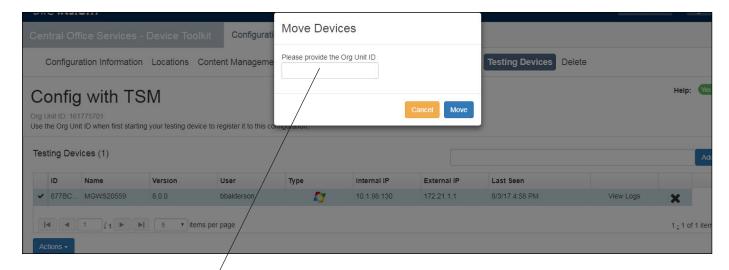
You can use the COS - Device Toolkit to move testing devices between configurations, remove testing devices from configurations, and reload (refresh) the page.



1. Select **Testing Devices** for the correct configuration. To move, remove, or reload testing devices, select each device by clicking the checkmark next to it and use the Actions drop-down menu to select the correct option.

ment to select the correct option.		
Option	Description	
Move Devices	This option moves each selected testing device to a different configuration. You are prompted to supply the ORG Unit ID for the target configuration.	
Remove Devices	This option removes each selected testing device from the current configuration. A dialog box is displayed that confirms the removal. You also can remove a device by clicking the x in the rightmost device field.	
Reload This Page	This option refreshes the display using the latest information about the current testing devices.	

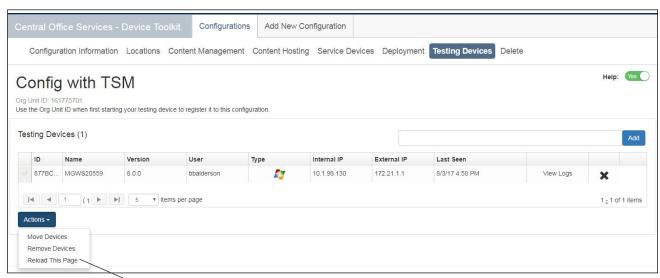
Moving, Removing, and Reloading Testing Devices (cont.)



2a. If you attempt to move a device, the Move Devices dialog box appears. Enter the testing device's target ORG Unit ID and click **Move** to move the testing device (or **Cancel** to cancel the move).



2b. If you attempt to remove a device, the Confirm Removal dialog box appears. Click **Remove** to remove the testing device from the configuration (or **Cancel** to cancel the removal).



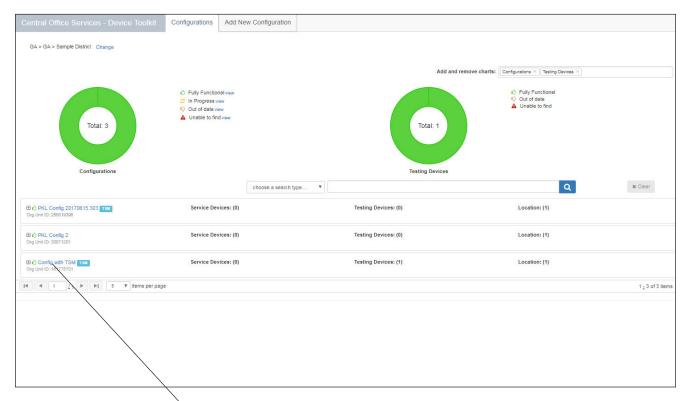
3. After you move or remove a device, you can select Reload This Page from the Actions drop-down menu to refresh the display with the latest information and to verify any changes that you made.

Moving Testing Devices between Districts and/or Schools

You can use the COS - Device Toolkit to move one or more testing devices between districts and/or schools without having to uninstall and reinstall each testing device. To perform this process, move the testing device from its current configuration (the source configuration) to a target configuration for a different district and/or school.

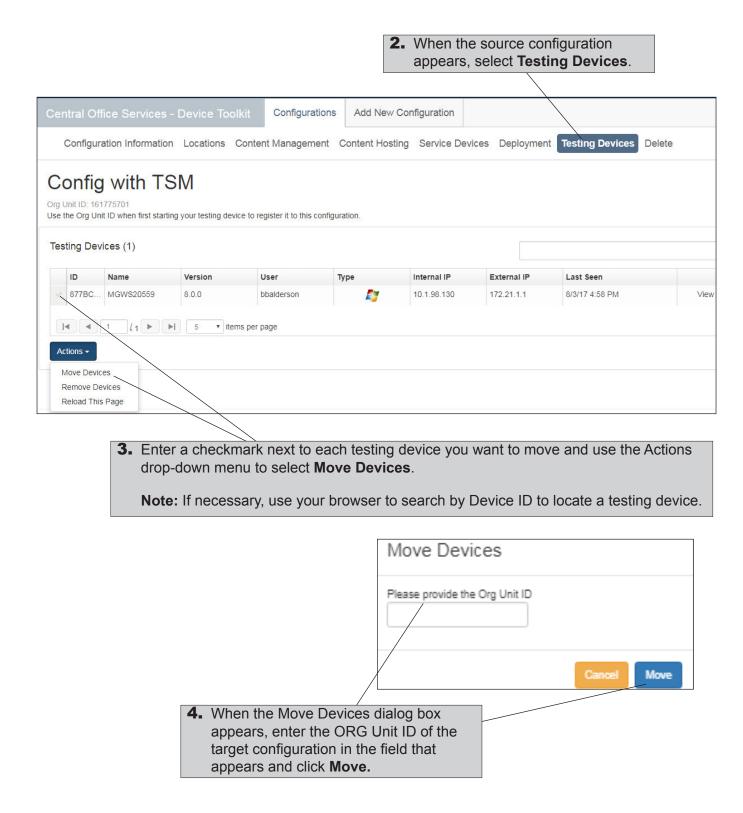
Note: This process is useful for keeping your testing devices organized. For testing purposes, testing devices do not have to be in their designated district or school—any student at any school can test on any testing device. The COS - Device Toolkit settings are basically used to indicate whether automatic INSIGHT software updating (Auto Update) is enabled and to provide the connection information for a proxy host, content caching, and response caching.

(!) Important: To perform this process, you must have the correct permissions to access multiple districts and/or schools. You also must be able to locate the testing devices in the source configuration and know the target configuration's ORG Unit ID.

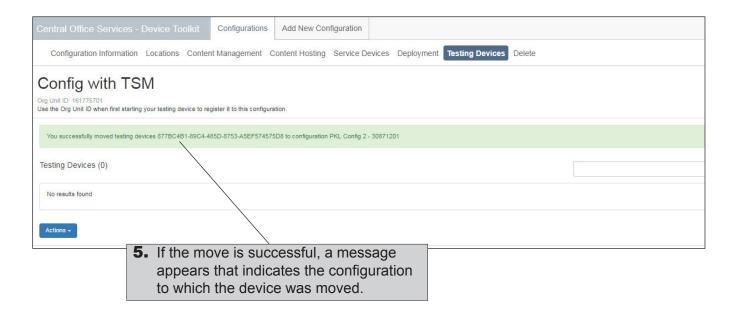


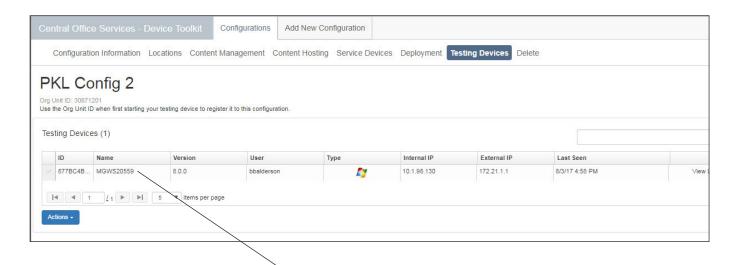
1. To move one or more testing devices to a different district or school (configuration), from the COS - Device Toolkit, select the source configuration from the dashboard.

Moving Testing Devices Between Districts and/or Schools (cont.)



Moving Testing Devices between Districts and/or Schools (cont.)





6. To verify the device was moved, select click the Configurations tab to display the dashboard, select the target configuration, and select **Testing Devices**. The testing device should appear on the Testing Devices page of the target configuration.

Moving Testing Devices between Districts and/or Schools (cont.)

7. Steps 7–9 are optional steps you can perform to further verify that the move process was successful.

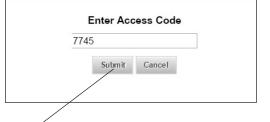
Start DRC INSIGHT on the testing device and open the System Readiness Check by clicking the checkmark in the lower left corner of the main INSIGHT testing page.



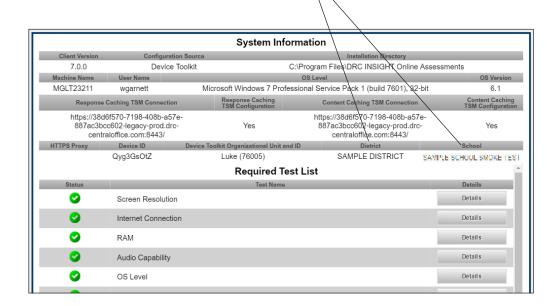


System Readiness Check Access Code:7745





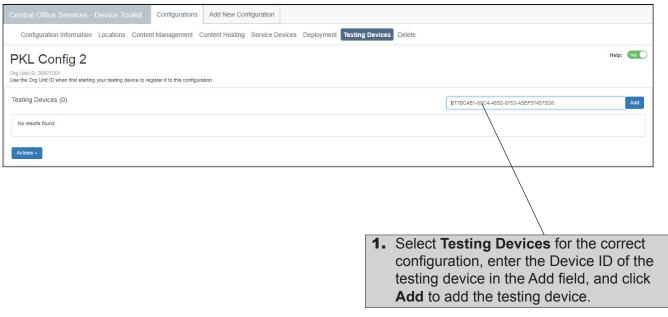
- **8.** When prompted, enter the access code **7745** in the Enter Access Code field and click **Submit**.
- **9.** On the System Information page that appears, the District column and/or the School column should indicate the target location.

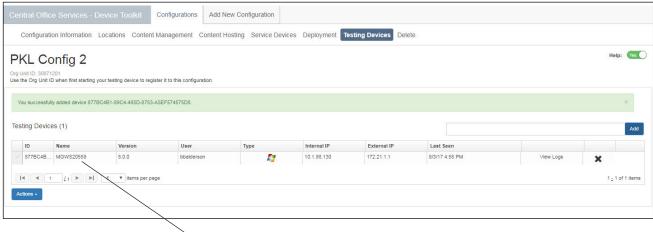


Adding Testing Devices by Device ID

You can use the COS - Device Toolkit to add testing devices to a configuration to organize your testing devices for testing. To add a testing device, you must know the Device ID.

Note: If you add a device from one configuration to another configuration, the device is moved from the first configuration into the second configuration.





2. The Testing Devices grid reappears with the testing device added to the configuration. (You may need to select **Reload This Page** from the Actions drop-down menu to refresh the display.)

Note: The Device ID is not the testing device's serial number.

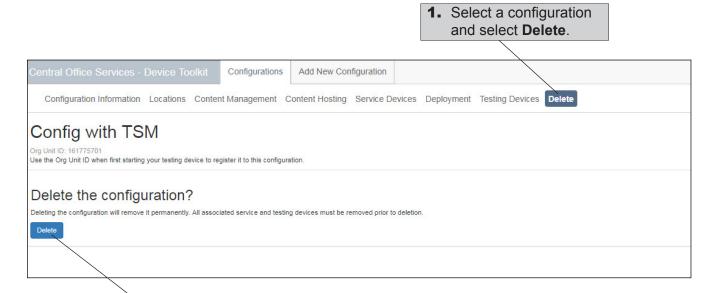
Viewing Testing Device Log Files

You can use the COS - Device Toolkit log files to review system information about the testing devices assigned to a configuration. The log entries are stored for 30 days.



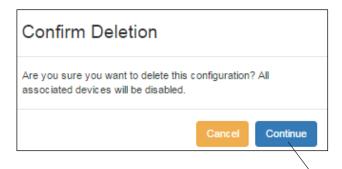
Deleting Configurations

You can use the COS - Device Toolkit Delete to delete a configuration. To delete a configuration, all of the testing devices and TSMs associated with the configuration must be removed from the configuration (see "Moving, Removing, and Reloading Testing Devices" on page 154).



2. Click **Delete** to delete the configuration from the Central Office Services database.

Note: You must remove all of the configuration's TSMs and testing devices before you can delete the configuration.



3. When you click **Delete**, if there are no TSMs or testing devices associated with the configuration, the Confirm Deletion dialog box appears, allowing you to verify your decision. Click **Continue** to delete the configuration (or **Cancel** to cancel the deletion).

Volume IV: DRC INSIGHT

Introduction

Introduction

About This Guide

Important Information

DRC INSIGHT

This user guide is part of a multi-volume set that describes how to configure, install, manage, and troubleshoot the DRC INSIGHT Online Learning System, or DRC INSIGHT. This volume, *Volume IV: DRC INSIGHT*, describes how to configure, install, manage, and troubleshoot the DRC INSIGHT software. It contains installation information for the various environments that support INSIGHT and describes how to use the System Readiness Check to verify that your testing devices are ready for testing.

(!) Important: Throughout this user guide, the Information icon ((!)) indicates important information or crucial tips.

The main component of the DRC INSIGHT Online Learning System is DRC INSIGHT, the secure Web-browser testing interface installed on each testing device. This software communicates with the DRC INSIGHT server to provide test questions to the test taker and to send responses to the DRC INSIGHT server, which stores them securely. Throughout this user guide, we refer to the secure Web-browser testing interface as simply INSIGHT.

Windows Installation

What's Covered in This Section

This section describes the INSIGHT installation process in a Windows environment. The first part of this section provides basic information about installing INSIGHT interactively using the installation wizard. Then, the section provides information about installing INSIGHT silently (non-interactively) and uninstalling INSIGHT.

! Important: To make the INSIGHT installation process easier, DRC recommends that you install the TSM before you use the Central Office Services - Device Toolkit to create configurations and before you install INSIGHT.

Installing Multiple TSMs and INSIGHT If you plan to access multiple testing programs using the same testing computers, you may need to install more than one TSM (using multiple testing computers) and use INSIGHT to access more than one testing program.

- You cannot install more than one TSM on the same computer.
- You can install a TSM and INSIGHT on the same computer.

.....

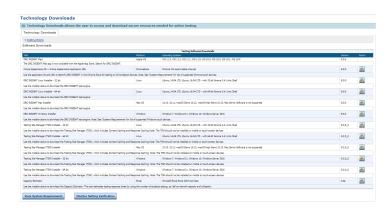
 You can use INSIGHT to access multiple testing programs (for example, ACCESS for ELLs 2.0 and your state-specific testing program) from the same device. You access these testing programs using the same DRC INSIGHT desktop shortcut. When you start INSIGHT, a page appears that lists the different testing programs from which you can select.

Quick Tour: Installing INSIGHT for Windows OS

This Quick Tour describes how to install INSIGHT for Windows. DRC provides an easy-to-use wizard to install the software. You must be logged in as an Administrator to have the correct installation access rights.

To launch the wizard and start the installation, log in to the WIDA Assessment Management System (WIDA AMS), open the All Applications menu bar, select General Information—Technology Downloads, and click the DRC INSIGHT Windows Installer icon ().

Note: There is only one version of DRC INSIGHT for Windows. The directory where it is installed depends on whether you are using a 32-bit or 64-bit version of Windows.



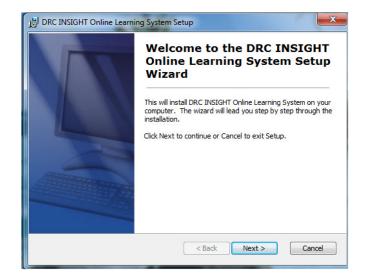
 After you have downloaded the installation program, click the DRC_INSIGHT_Setup. msi icon to start an installation.

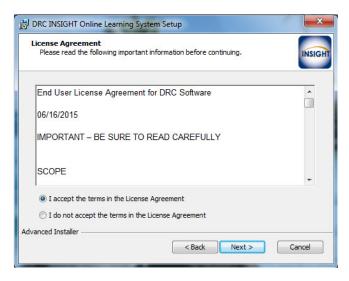
The Welcome to the INSIGHT Online Learning System Setup Wizard window appears. Click **Next** to continue.

Note: On most installation windows, you can click **Back** to return to the previous window or **Next** to proceed to the next window. Some windows display other options.

3. The License Agreement window appears. To continue the installation, read the agreement and select the option I accept the terms in the License Agreement. (If you do not accept the agreement, the installation ends.)

Click **Next** to continue when the Next button is active.

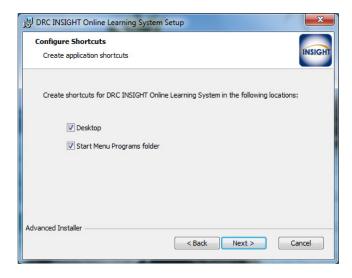




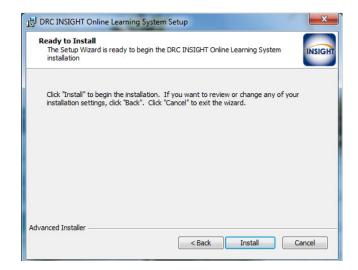
Quick Tour: Installing INSIGHT for Windows OS (cont.)

4. The Configure Shortcuts window appears. Use this window to indicate which shortcuts the installation process should create. DRC recommends that you select both shortcuts.

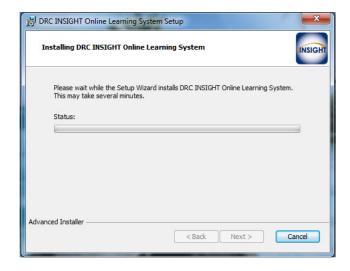
After you have made your selections, click **Next** to continue.



5. The Ready to Install window appears. Click Back to review or change your settings, Install to start the installation, or Cancel to cancel the process.



6. While INSIGHT is being installed, a progress window indicates the status of the installation. If necessary, you can click Cancel to end the installation process.



Quick Tour: Installing INSIGHT for Windows OS (cont.)

7. When the installation nears completion, the Completing the DRC INSIGHT Online Learning System Setup Wizard window appears, indicating that INSIGHT is almost installed.

You can specify whether to launch the System Readiness Check (the default value).

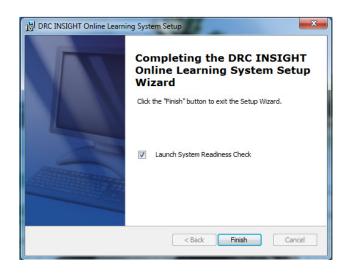
The System Readiness Check verifies that the testing computer has sufficient screen resolution, Internet connectivity, memory (RAM), and other technical specifications needed to perform online testing (see "Using the System Readiness Check" on page 223).

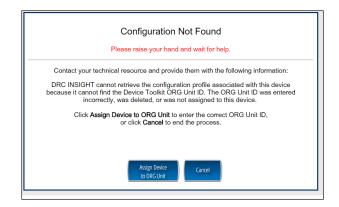
Make your selections and click **Finish** to register the device with INSIGHT.

- 8. The Configuration Not Found page appears. To successfully register the device with INSIGHT, you need to locate the device's ORG Unit ID from the Central Office Services Device Toolkit. When you have the ORG Unit ID (you can copy and paste it from the Central Office Services Device Toolkit), click **Assign Device to ORG Unit**.
- 9. When the Device Registration page appears, enter the device's ORG Unit ID from the Central Office Services Device Toolkit (or copy and paste it from the Central Office Services Device Toolkit) and click Add. When the Register button is enabled, click Register.

When the device registers, the System Readiness Check will appear for the configuration's testing program.

Note: If the configuration points to more than one testing program, a page appears that you can use to select your testing program. When the device registers, the System Readiness check will appear for the testing program you selected.







Quick Tour: Installing INSIGHT for Windows OS (cont.)

10. When the System Readiness Check launches, the System Information screen appears. You can see details about each System Readiness Check test, execute the tests, and view the results.

Click **Execute Tests** to verify that the testing computer and any TSMs are configured correctly. Click **Details** next to any test you need more information about (see "Using the System Readiness Check" on page 223).

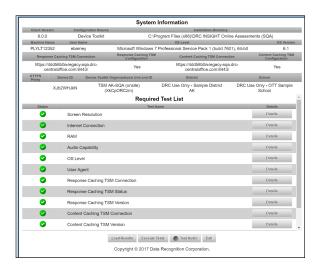
When ready, click Exit.

11. When the device is successfully registered with INSIGHT, one of two pages appears.

If a single testing program (location) is associated with the configuration, the main testing page appears. If multiple testing programs are associated with the configuration, a page appears that you can use to select the testing program. After you make your selection, the main testing page appears.

You can try the Test Practice using your INSIGHT log-in information, or sign in to the System Readiness Check by clicking the checkmark in the lower left side [] and entering the System Readiness Check Access Code of 7745 (available in the Central Office Services - Device Toolkit—see *Volume III: Configuring Devices for Testing*).

12. The default installation adds a single shortcut to your desktop. Use the shortcut to sign in to the Test Practice, try the Test Demo, view sample test items, or to test using your INSIGHT log-in information.



Select a testing program:

Testing Program A

Testing Program B





Access Code: 7745

Managing INSIGHT

This section describes how to install INSIGHT from a command line, how to start and stop INSIGHT and the System Readiness Check, and how to uninstall INSIGHT. You must be logged in as an Administrator to have the correct installation and uninstallation access rights.

① Important: After installing INSIGHT, start INSIGHT to register the device with its Central Office Services - Device Toolkit configuration. (You can do this automatically, using a script or device management software, or manually.) Remember to register the device before applying any desktop protection software (such as Deep Freeze) to avoid having the device re-register with the Central Office Services - Device Toolkit every time INSIGHT is launched.

Installing INSIGHT from a Command Line

To install INSIGHT from a command line, execute the INSIGHT setup command—DRC_INSIGHT_ Setup.msi—using the specific options you want to use. To display a list of the command line options, use the /h (help) parameter with the setup command by selecting Run... and specifying DRC_INSIGHT_ Setup.msi -h.

The following figure shows a list of the standard options. Refer to the *Windows Installer Software Development Kit* for detailed information about the command line syntax.

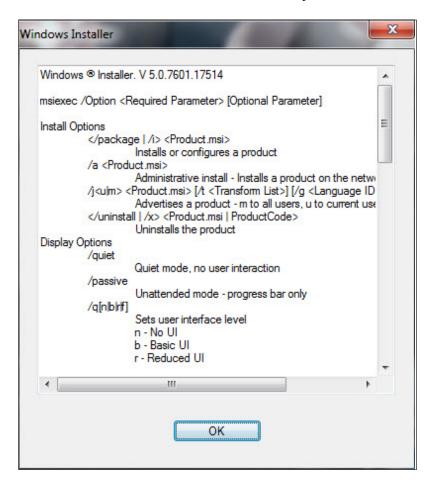


Figure: INSIGHT Setup Command Options

Installation Command Syntax and Example

The following is the syntax for the install program command:

DRC_INSIGHT_Setup.msi properties> <MSI switches>

Note: All properties are passed in a *key=value* format (see the example below).

Example

The following examples install INSIGHT, with and without a proxy host, using an ORG Unit ID of 123456789.

(1) Important: Do not copy and paste this information—it is meant for example only.

msiexec.exe /i DRC_INSIGHT_Setup.msi /qn https_proxy="https://10.1.1.1:8080" ou_ids="123456789"

msiexec.exe /i DRC_INSIGHT_Setup.msi /qn ou_ids="123456789"

Where:

ou_ids is the ORG Unit ID number to which the device is assigned. This parameter points to the specific configuration information for TSM content, district and school ID, proxy server information, and auto-update information. It is used to register the device with INSIGHT.

https_proxy is the path to the proxy host (if specified).

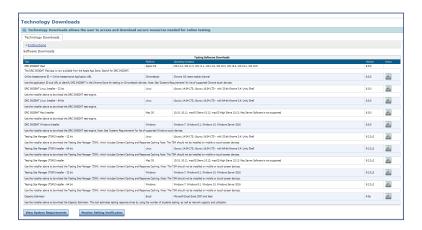
Note: For more information about the MSIEXEC properties and switches that you can use with the installation application, refer to the Microsoft Command Line options page.

Installing INSIGHT Silently

1. To install INSIGHT silently (non-interactively), log in to WIDA AMS at https://www.wida-ams.us, open the All Applications menu bar, select General Information—Technology Downloads.



2. From the Technology Downloads page, download the Windows INSIGHT installation file, DRC_INSIGHT_Setup.msi, to the C: drive.





3. From a command prompt, use the **Change Directory** (**CD**) command to change to the directory where you installed the INSIGHT file and enter the following command:

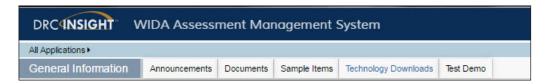
msiexec.exe /i DRC_INSIGHT_Setup.msi /qn https_proxy="https://10.1.1.1:8080" ou_ids="123456789"

Note: If you use a proxy host, specify the path to the proxy host between the quote marks. Otherwise, remove the HTTPS PROXY parameter.

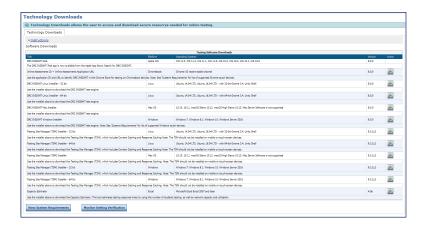
Installing INSIGHT Silently Using ORCA

To install INSIGHT silently using ORCA, perform the following steps:

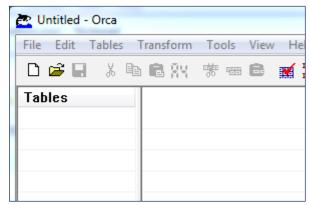
1. To install INSIGHT silently (non-interactively), log in to WIDA AMS at https://www.wida-ams.us, open the All Applications menu bar, select General Information—Technology Downloads.



2. From the Technology Downloads page, download the Windows INSIGHT installation file, DRC_INSIGHT Setup.msi, to the C: drive.



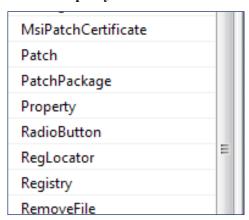
- **3.** Download a copy of ORCA from https://msdn.microsoft.com/en-us/library/windows/desktop/aa370557(v=vs.85).aspx to your Program Files folder.
- 4. Right-click Orca.exe and select Open.



5. Browse to the DRC_INSIGHT_Setup.msi file and open it.

Installing INSIGHT Silently Using ORCA (cont.)

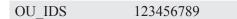
6. Select Property.



7. Sort the display using the **Property** column.



8. Locate the **OU_IDS** field and enter the ORG ID with no quotes or spaces (see the example below).



9. If you are using a proxy host, locate the **HTTPS PROXY** field and enter the full proxy address with no spaces (see the example below).

HTTPS PROXY https://10.1.1.1.:8080

- 10. Save the file and exit Orca.
 - ① Important: Save the file using Save, not Save As.
- 11. Use the following command to run the updated installer with the new embedded switches:

msiexec.exe /i DRC_INSIGHT_Setup.msi /qn

Note: Use qb instead of qn for Windows 8.

Starting INSIGHT

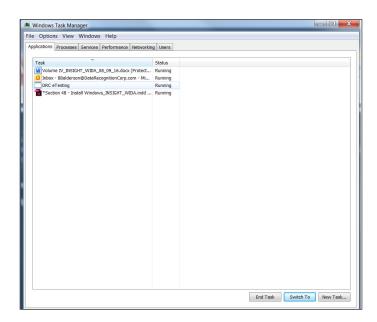
You can start INSIGHT from a testing computer using the desktop shortcut, the Windows Start menu, or Windows Explorer.

- For 64-bit Windows, start Windows Explorer and select the installation drive—**Program Files (x86) DRC INSIGHT Online Assessments—DRCInsight.exe** for INSIGHT.
- For 32-bit Windows, start Windows Explorer and select the installation drive—Program Files—DRC INSIGHT Online Assessments—DRCInsight.exe for INSIGHT.

Stopping INSIGHT in Windows 7

If INSIGHT becomes unresponsive on a Windows 7 computer, you can stop it by using the Windows Task Manager 7 (see the figure).

1. Start the Task Manager, by pressing Ctrl-Alt-Delete and selecting Start Task Manager.



2. When the Task Manager window appears, select **DRC eTESTING** and click **End Task**.

Stopping INSIGHT in Windows 10

If INSIGHT becomes unresponsive on a Windows 10 computer, you can stop it by pressing Alt–F4.

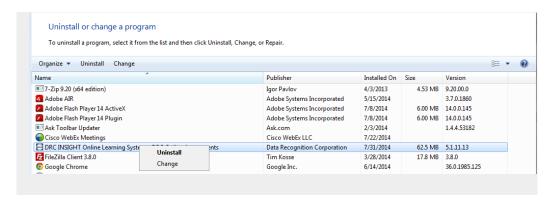
Uninstalling INSIGHT

You can uninstall (remove) INSIGHT from a Windows machine by using the Control Panel, using the Start menu, or silently using a command.

Note: If you cannot remove INSIGHT, please contact DRC Technical Support.

Using the Control Panel

To uninstall INSIGHT using the Control Panel, select Uninstall a Program, select DRC INSIGHT Online Learning System–DRC Online Assessments, right-click, and select Uninstall.



Using the Start Menu

To uninstall INSIGHT using the Start Menu, select **All Programs–DRC INSIGHT Online Assessments–DRC INSIGHT Uninstaller** and click **Yes** when the Windows Installer dialog box appears.

Using a Command

To uninstall INSIGHT silently, use the following command from a command prompt window as administrator from the folder in which you installed INSIGHT.

msiexec.exe /x DRC_INSIGHT_Setup.msi /qn

Note: Use qb instead of qn for Windows 8.

Mac (OS X and macOS) Installation

Mac (OS X and macOS) Installation

What's Covered in This Section

■ Installing
Multiple TSMs
and INSIGHT

This section describes the INSIGHT installation process in a Mac (OS X and macOS) environment. The first part of this section provides basic information about installing INSIGHT interactively using the installation wizard. Then, the section provides information about installing INSIGHT using a software deployment tool and uninstalling INSIGHT.

(!) Important: To make the INSIGHT installation process easier, DRC recommends that you install the TSM before you use the Central Office Services - Device Toolkit to create configurations and before you install INSIGHT.

If you plan to perform multiple types of assessments using the same testing computers, you may need to install more than one TSM and use INSIGHT to access more than one testing program.

- You cannot install more than one TSM on the same computer.
- You can install a TSM and INSIGHT on the same computer.
- You can use INSIGHT to access multiple testing programs (for example, ACCESS for ELLs 2.0 and your state-specific testing program) from the same device. You access these testing programs using the same DRC INSIGHT desktop shortcut. When you start INSIGHT, a page appears that lists the different testing programs from which you can select.

This Quick Tour describes how to install INSIGHT on a Mac. DRC provides an easy-to-use wizard to install the software.

- Double-click the downloaded DRC_ INSIGHT_Setup.pkg file to start the wizard.

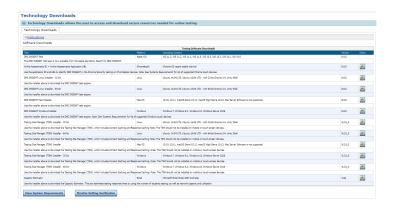
Note: You must be a Mac System Administrator to install INSIGHT.

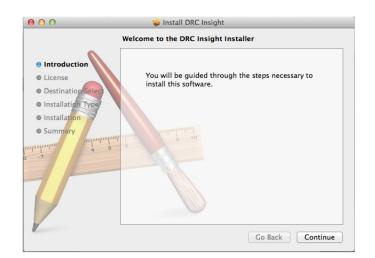
3. The Welcome to the DRC Insight Installer window appears.

Note: On most installation windows, you can click **Go Back** to return to the previous window, **Continue** to proceed to the next window, or **Cancel** to cancel the installation. Some windows display other options.

Click Continue.

4. The Software License Agreement window appears. You can read through the Agreement. To continue, read the license and click **Agree** or click **Save...**.







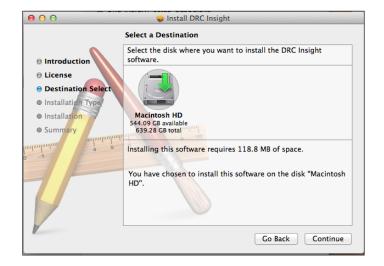
If you click **Continue** without reading the license or clicking **Save**, a window appears to verify your choice and explain the options.

To continue, click **Agree** and **Continue**.



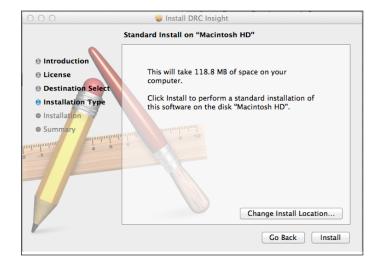
5. The Select a Destination window appears, indicating the amount of disk space the installation will require.

Click Continue.

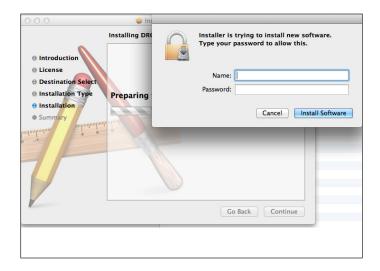


6. The Standard Install on "Macintosh HD" window appears. You can change the installation location or use the default location.

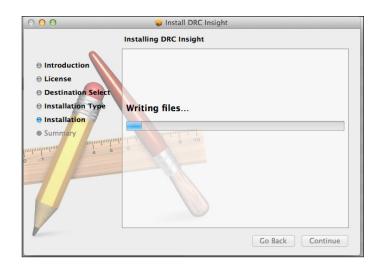
To use the default location, click **Install**.



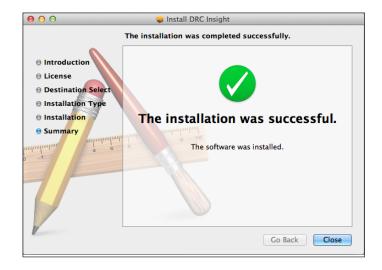
7. You must be a Mac System Administrator to install INSIGHT. After you enter your name and password and click **Install Software**, the installation begins.



8. During the installation, a window indicates the progress of the installation.



9. After the installation, a window indicates the status of the installation. If the installation is successful, click Close. Otherwise, if necessary, click Go Back to change your installation options.



- 10. The Configuration Not Found page appears. To successfully register the device with INSIGHT, you need to locate the device's ORG Unit ID from the Central Office Services Device Toolkit. When you have the ORG Unit ID (you can copy and paste it from the Central Office Services Device Toolkit), click **Assign Device** to ORG Unit
- 11. When the Device Registration page appears, enter the device's ORG Unit ID from the Central Office Services Device Toolkit (or copy and paste it from the Central Office Services Device Toolkit), click **Add**.

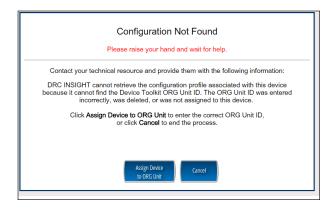
When the Register button is enabled, click **Register**.

When the Register button is enabled, click **Register**. When the device registers, the System Readiness Check will display for the configuration's testing program.

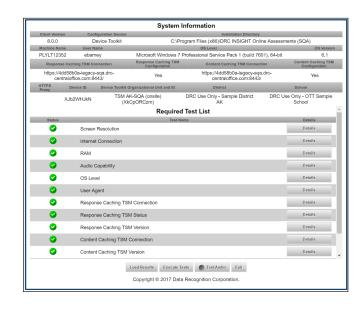
Note: If the configuration points to more than one testing program, a page appears that you can use to select your testing program. When the device registers, the System Readiness check will appear for the testing program you selected.

12. When the System Readiness Check launches, the System Information screen appears. You can see details about each System Readiness Check test, execute the tests, and view the results.

Click **Execute Tests** to verify that the testing computer and any TSMs are configured correctly. Click **Details** next to any test you need more information about (see "Using the System Readiness Check" on page 223). When ready, click **Exit**.







13. When the device is successfully registered with INSIGHT, one of two pages appears.

If you configured a single testing program, the main testing page appears. If you configured more than one testing program, a page appears that you can use to select the testing program. After you make your selection, the main testing page appears.

Select a testing program:

Testing Program A

Testing Program B

You can try the Test Practice using your INSIGHT log-in information or sign in to the System Readiness Check by clicking the checkmark [] in the lower left side and entering the System Readiness Check Access Code of 7745 (available in the Central Office Services - Device Toolkit—see *Volume III: Configuring Devices for Testing*).

14. The installation adds a single shortcut to your desktop. Use the shortcut to sign in to the Test Practice, try the Test Demo, view sample test items, or test using your INSIGHT log-in information.





Access Code: 7745

Managing INSIGHT

......

This section describes how to install INSIGHT using a software deployment tool, how to start and stop INSIGHT, and how to uninstall INSIGHT.

① Important: After installing INSIGHT, start INSIGHT to register the device with its Central Office Services - Device Toolkit ORG Unit configuration. (You can do this automatically using a script or device management software, or manually.) Remember to register the device before applying any desktop protection software (such as Deep Freeze) to avoid having the device re-register with the Central Office Services - Device Toolkit every time INSIGHT is launched.

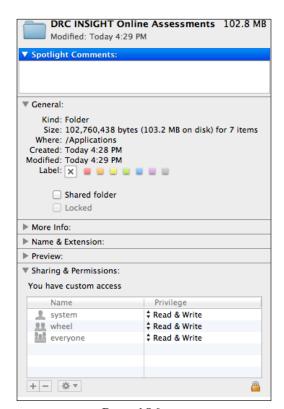
Installing INSIGHT Using a Software Deployment Tool

The following example shows how to install INSIGHT on a Mac using the Apple Remote Desktop software.

Note: The Apple Remote Desktop software was used for this example, but the process is similar with other software deployment tools.

- 1. If there is an old version of INSIGHT, remove the old version (see "Uninstalling INSIGHT" on page 188) and install and configure the INSIGHT secure browser on the computer from which you will be distributing the software (see "Quick Tour: Installing INSIGHT for Mac OS X and macOS" on page 181).
 - (!) Important: To ensure that testers can have Read and Write access the correct folders on the testing computers, you may need to adjust the permissions on the folders you will be copying before you distribute them to the testing computers (see the figure below).

......



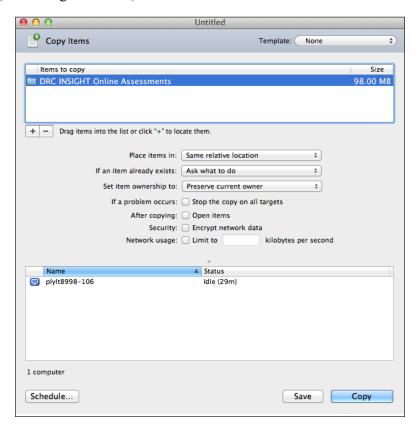
Page 186

Installing INSIGHT Using a Software Deployment Tool (cont.)

2. Start Apple Remote Desktop and select the following directory in a Copy Items window from the Apple Remote Desktop administrator's computer.

/Applications/DRC INSIGHT Online Assessments

Note: You may need to adjust the destination locations and permissions depending on students' permissions (see the figure below).



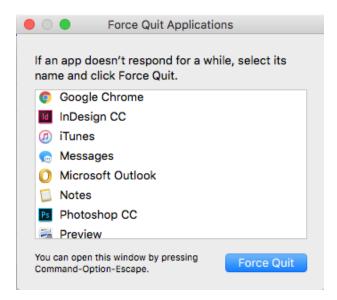
- **3.** Copy the folders to your list of destination computers.
- **4.** Verify the installation by running the Software Readiness Check on the computers where you installed the software.

Starting INSIGHT

You can start INSIGHT from a testing computer by using the desktop shortcut created by the installer, or from the Applications folder by double-clicking **Applications–DRC INSIGHT Online Assessments–DRCInsight Online Assessments.app**.

Stopping INSIGHT

1. If INSIGHT becomes unresponsive, try the key combination Command-Option-Esc.



2. When the Force Quit Applications window displays, select the **DRC INSIGHT** App and click **Force Quit**.

Uninstalling INSIGHT

You can uninstall (remove) INSIGHT using the Applications folder.

Note: You also can run the uninstall process silently.

Using the Applications Folder

You can uninstall (remove) INSIGHT by double-clicking **Applications–DRC INSIGHT Online Assessments–DRC Uninstaller.app**. Click **Yes** when the Warning dialog box appears, enter your Mac Administrator login information, and click **OK**. The uninstaller automatically uninstalls the program.

Linux Installation

Linux Installation

What's Covered in This Section

This section describes the INSIGHT installation process in a Linux environment. The first part of this section provides basic information about installing INSIGHT interactively using the installation wizard. Then, the section provides information about installing INSIGHT from the terminal or a command line, and uninstalling INSIGHT with the Synaptic Package Manager or by command.

Note: We assume that as an experienced Linux user you are familiar with Linux concepts such as Terminal mode, the Synaptic Package Manager software, and the Ubuntu Software Center.

① Important: To make the INSIGHT installation process easier, DRC recommends that you install the TSM before you use the Central Office Services - Device Toolkit to create configurations and before you install INSIGHT.

Installing Multiple TSMs and INSIGHT If you plan to access multiple testing programs using the same testing computers, you may need to install more than one TSM (using multiple testing computers) and use INSIGHT to access more than one testing program.

- You cannot install more than one TSM on the same computer.
- You can install a TSM and INSIGHT on the same computer.
- You can use INSIGHT to access multiple testing programs (for example, ACCESS for ELLs 2.0 and your state-specific testing program) from the same device. You access these testing programs using the same DRC INSIGHT desktop shortcut. When you start INSIGHT, a page appears that lists the different testing programs from which you can select.

■ Installing 32-bit Java Libraries

(!) Important: On some 64-bit Linux systems, you must install the 32-bit Java libraries for the INSIGHT installation program to run. To install these libraries, enter the following commands from a Terminal session.

sudo -i

cd /etc/apt/sources.list.d

echo "deb http://old-releases.ubuntu.com/ubuntu/ raring main restricted universe multiverse" >ia32-libs-raring.list

apt-get update

apt-get install ia32-libs

If the apt-get install ia32-libs command fails, enter the following commands.

sudo dpkg --add-architecture i386

sudo apt-get update

sudo apt-get install ia32-libs

Linux Installation

Installing the Gnome Desktop Environment

The Gnome desktop is required before you can install INSIGHT on a Linux computer. Follow this procedure to install the Gnome desktop.

- 1. Press Ctrl+Alt+T to open a Terminal window.
- **2.** Type the following commands at the prompt and press **Enter**. The first command (before the semicolon) updates Ubuntu. The second command installs the Gnome desktop.

sudo apt-get update; sudo apt-get install gnome-session-fallback

3. Type your password and press **Enter**.

4. The installation progress displays, including a message that indicates how much disk space is used for Gnome. When asked if you want to continue, type **y** and press **Enter**.

```
gstreamerw.10-gcont indicator-applet-complete libgoa-backend-1.0-1 libpanel-applet-4-0 metacity notification-daemon
The following packages will be upgraded:
   gnome-settings-daemon-schemas
1 upgraded, 21 newly installed, 0 to remove and 140 not upgraded.
Need to get 10.3 MB of archives.
After this operation, 51.1 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
```

5. When the installation completes, at the prompt: type exit and press Enter to close the Terminal window.

```
Secting up notification-uaemon (0.7.0-1) ...

Setting up gnome-session-flashback (1:3.8.0-1ubuntu12) ...

Setting up gnome-session-fallback (1:3.8.0-1ubuntu12) ...

Setting up indicator-applet-complete (12.10.2+14.04.20140403-0ubuntu1) ...

Processing triggers for libc-bin (2.19-0ubuntu6) ...

lori@lori-VirtualBox:~$ exit
```

6. Click the upper-right corner of the screen to display the System menu. Select **Log Out** to end the

session.

Installing the Gnome Desktop Environment (cont.)

7. On the Login screen, click the Ubuntu icon.



8. A list of available desktop environments displays. Select the GNOME Flashback option for Metacity.

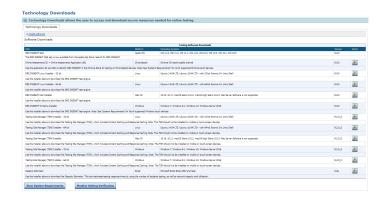


9. The Login screen displays. Enter your password and press Enter to log in. After a successful log in to Gnome, you can begin installing INSIGHT on the computer.

Quick Tour: Installing INSIGHT for Linux

This Quick Tour describes how to install the INSIGHT for Linux. DRC provides an easy-to-use wizard to install the software. In a Linux environment, you use the Ubuntu Software Center to run the wizard.

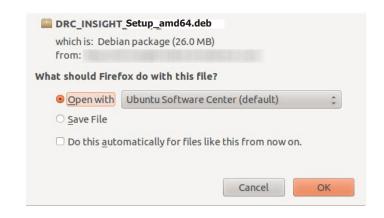
To launch the wizard and start the installation, log in to the WIDA Assessment Management System (WIDA AMS), open the All Applications menu bar, select General Information—Technology Downloads, and click the DRC INSIGHT Linux Installer icon () to download the INSIGHT setup file, DRC_INSIGHT_Setup_amd64.deb (for 64-bit versions of Linux), to the Downloads directory on your testing computer.



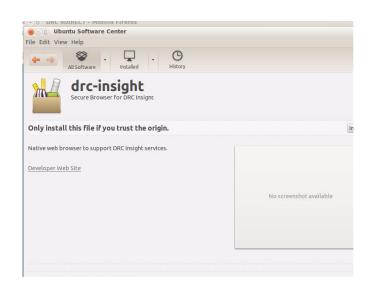
2. The Opening DRC_INSIGHT_Setup_ amd64.deb dialog box appears.

Select Open with Ubuntu Software Center (default) if it is not selected and click OK.

Note: Some browsers do not display a dialog box and download the installation file directly.

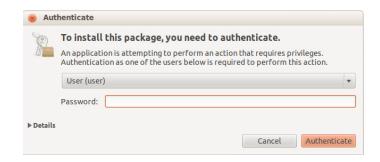


3. When the Ubuntu Software Center window appears, click **Install**.



Quick Tour: Installing INSIGHT for Linux (cont.)

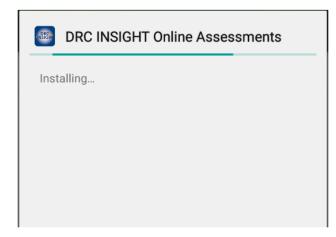
4. The Authenticate dialog box appears. Select your username from the drop-down menu, enter your password and click **Authenticate**.



5. The DRC License Agreement window appears. Check the I accept the License agreement checkbox and click Forward. The INSIGHT installation starts.



6. While INSIGHT is installing, a page indicates the status of the installation.



Quick Tour: Installing INSIGHT for Linux (cont.)

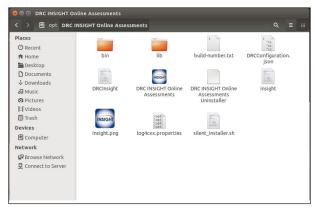
- 7. After INSIGHT is installed, navigate to the directory where you installed it and double-click the DRC INSIGHT Online Assessments icon to start INSIGHT and register the device.
- 8. The Configuration Not Found page appears. To register the device with INSIGHT, you need to locate the device's ORG Unit ID from the Central Office Services Device Toolkit. When you have ORG Unit ID (you can copy and paste it from the Central Office Services Device Toolkit), click **Assign Device to ORG Unit**.
- 9. When the Device Registration page appears, enter the device's ORG Unit ID from the Central Office Services Device Toolkit (or copy and paste it from the Central Office Services Device Toolkit), and click **Add**.

When the Register button is enabled, click **Register**. When the device registers, the System Readiness Check will display for the configuration's testing program.

Note: If the configuration points to more than one testing program, a page appears that you can use to select your testing program. When the device registers, the System Readiness check will appear for the testing program you selected.

10. When the System Readiness Check launches, the System Information screen appears. You can see details about each System Readiness Check test, execute the tests, and view the results.

Click **Execute Tests** to verify that the testing computer and any TSM(s) are configured correctly. Click **Details** next to any test you need more information about (see "The System Readiness Required Tests" on page 228). When ready, click **Exit**.









Quick Tour: Installing INSIGHT for Linux (cont.)

11. When the device is successfully registered with INSIGHT, one of two pages appears:

If you configured a single testing program, the main testing page appears. If you configured more than one testing program, a page appears that you can use to select the testing program. After you make your selection, the main testing page appears.

You can try the Test Practice using your INSIGHT log-in information, or sign in to the System Readiness Check by clicking the checkmark [] in the lower left side and entering the System Readiness Check Access Code of 7745 (available in the Central Office Services - Device Toolkit—see *Volume III:* Configuring Devices for Testing).

The System Readiness Check verifies that the testing computer has sufficient screen resolution, Internet connectivity, memory (RAM), and other technical specifications needed to perform online testing (see "Using the System Readiness Check" on page 223).

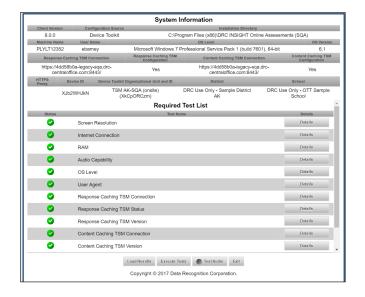
Select a testing program:

Testing Program A

Testing Program B







Linux Installation

Managing INSIGHT

This section describes how to install INSIGHT from the terminal or a command line and how to uninstall INSIGHT with the Synaptic Package Manager or by command. To perform the commands in this section you must open a Terminal window and be logged in as a Linux Administrator.

① Important: After installing INSIGHT, start INSIGHT to register the device with its Central Office Services - Device Toolkit configuration. You can do this automatically, by using a script or device management software, or manually. Remember to register the device before applying any desktop protection software (such as Deep Freeze) to avoid having the device re-register with the Central Office Services - Device Toolkit every time INSIGHT is launched.

Installing INSIGHT Using the Terminal

To install INSIGHT in Terminal mode, do the following:

1. Log in to WIDA AMS, open the **All Applications** menu bar, select **General Information–Technology Downloads** and click on the DRC INSIGHT Linux Installer icon to download the INSIGHT setup file, DRC INSIGHT Setup amd64.deb, to your testing computer.

Note: Depending on the Web browser you are using, a pop-up window may appear. If it does, click **Save File**. Other browsers automatically download the installation file to your Downloads directory.

- 2. Open the Terminal and navigate to your Downloads directory.
- 3. Enter the command sudo dpkg -i DRC INSIGHT Setup amd64.deb and press Enter.
- 4. Tab to the Yes field under I accept the license agreement and press Enter.



Installing INSIGHT from a Command Line

The INSIGHT installation places a silent install shell script (silent_installer.sh) in the Install directory. You can use this file to silently install INSIGHT in a Linux environment. Move the silent installer to the directory where the installer is located.

Installation Command Syntax and Example

The following is the syntax for the install program command:

silent_installer.sh properties>

The following is an example of the command you would run using the terminal from the folder where both the install file and the silent_installer.sh file are located. The example installs the software in silent mode and points to ORG Unit WkyutvmVG1.

sudo ./silent_installer.sh -o WkyutvmVG1

Uninstalling INSIGHT Using the Synaptic Package Manager

The Synaptic Package Manager is a graphical Linux tool to help you uninstall and remove software packages.

Note: You can install the Synaptic Package Manager by using the Ubuntu Software Center. Refer to your Linux documentation for instructions.

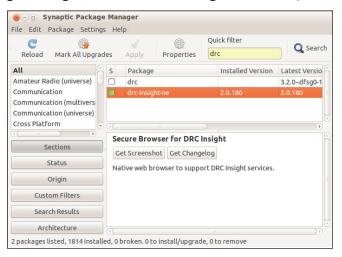
To uninstall INSIGHT, perform the following steps:

1. Start the Synaptic Package Manager by clicking on the **Synaptic Package Manager** icon in Applications.

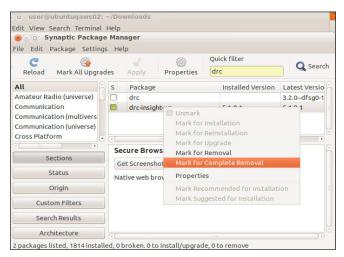


Uninstalling INSIGHT Using the Synaptic Package Manager (cont.)

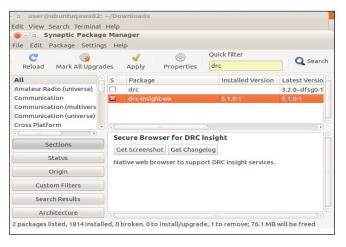
2. From the Synaptic Package Manager, search for the string drc in the Quick Filter window.



3. Select drc-insight and right-click. In the drop-down menu that appears, select Mark for Complete Removal.

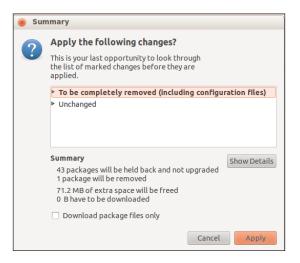


4. A red icon with a white x inside of it appears next to drc-insight. On the Synaptic Package Manager toolbar, click **Apply**.

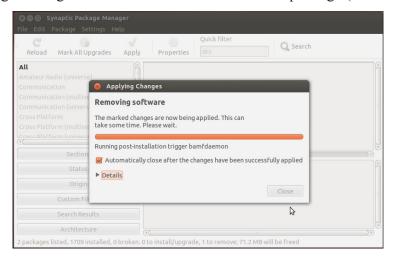


Uninstalling INSIGHT Using the Synaptic Package Manager (cont.)

5. The Apply the following changes? dialog box appears. Select To be completely removed (including configuration files) and click Apply.



6. The Synaptic Package Manager removes the INSIGHT software package (drc-insight).



Note: After you are finished uninstalling INSIGHT, if you see any files or folders remaining that you want to remove, you can remove them using the **rm** command (see "Cleanup" on the following page). If you have any questions, please contact DRC Customer Service.

Linux Installation

Uninstalling INSIGHT Manually

In a Linux environment, the command line tool for adding, removing, and updating software packages is apt-get. To remove INSIGHT, you can use the following command in terminal mode:

sudo apt-get remove drc-insight

Cleanup

The Linux apt-get uninstall may leave files behind, such as the drcconfiguration.json file. If this file still exists when you attempt a new installation, the settings for the new installation will not take effect. Use the following command from a Linux terminal to fully uninstall INSIGHT and remove its files.

sudo rm -rf /opt /\ DRC\ Online\ Assessments/

Note: For commands entered from a Linux terminal, the combination of backslash space (\) indicates a space.

Installing INSIGHT on iPad Devices

- What's Covered in This Section
- DRC INSIGHT and the Apple App Store
- Distributing and Registering INSIGHT

This section describes the process of installing INSIGHT for iPad devices in an iOS environment. It provides detailed information about installing INSIGHT and registering it to work with INSIGHT and the Testing Site Manager (TSM).

(!) Important: The DRC INSIGHT App (the INSIGHT App) for iPads is available from the Apple App Store.

There are two main parts to the process of installing INSIGHT on an iPad device to test with the INSIGHT App: distribution and registration.

- To *distribute* (deploy) the INSIGHT App (DRC INSIGHT.ipa), you have two options:
 - You can assign the INSIGHT App using Managed distribution, MDM software, and the Apple Volume Purchase Program (VPP). For more information, see the following link:

https://volume.itunes.apple.com/us/store

- You can download the INSIGHT App from the Apple App Store directly from an iPad.

MDM software can secure, monitor, manage, and support mobile devices deployed across mobile operators, service providers, and enterprises.

- To *register* the iPad to work with INSIGHT and the TSM, you have two options:
 - If your MDM software supports the Managed App Configuration feature, you can use the MDM software to deploy the INSIGHT configuration to register your iPad devices automatically. In other words, you can centrally configure multiple iPad devices using the MDM software. This is the preferred method of distributing the same configuration file to the iPads. It is easier and less error prone to register multiple iPads automatically than to manually register each iPad device.
 - If your MDM software does not support the Managed App Configuration feature (or you did not use MDM software to download the INSIGHT App), you can use the MDM software to distribute the INSIGHT App to the iPad devices, but you must manually register each iPad.

■ iPads, the TSM, and INSIGHT

A TSM is used primarily to cache and manage test content. iPad devices are not suitable for running a TSM and there is no TSM installer available for iPads. As a result, you should install the TSM software on a Windows, Mac (OS X and macOS), or Linux computer, and connect to the TSM when you install INSIGHT on the iPad device.

For TSM installation instructions, refer to *Volume II: Testing Site Manager (TSM)*. For TSM connection instructions, refer to *Volume III: Configuring Devices for Testing*.

Multiple Testing Programs

You can use INSIGHT to access multiple testing programs from the same device. You access these testing programs using the same DRC INSIGHT desktop shortcut. When you start INSIGHT, a page appears that lists the different testing programs from which you can select.

Preparing the iPad for Testing

The following is a summary of the process of installing and registering INSIGHT on multiple iPads using MDM software. This summary assumes that you have already installed and set up the MDM software and have enrolled all the iPads using the MDM tool.

Note: Some **s**ub-steps are included in the event that you are not using MDM software.

! Important: There are many versions of MDM software. To *deploy* and register your DRC INSIGHT iPad software automatically, your MDM software must support the Managed App Configuration feature. This feature is necessary to perform step 1a. Otherwise, after you deploy INSIGHT, you must register each iPad manually.

The process of manually installing and registering the INSIGHT App is not recommended. Because it is both time-consuming and labor-intensive, this approach is only practical for testing with a small number of iPads. For more information, see the following link:

https://www.apple.com/education/docs/Assessment with iPad.pdf.

1. Deploy INSIGHT

1a. With a Configuration File

In your application deployment, choose the DRC INSIGHT App in the Apple App Store and locate the configuration file (ios.plist) you created using the Central Office Services - Device Toolkit (see *Creating a Configuration File* in *Volume III: Configuring Devices for Testing*).

Deploy the DRC INSIGHT executable and configuration files to your iPads using your MDM software.

1b. Without a Configuration File

In your application deployment, choose the DRC INSIGHT App in the Apple App Store and deploy it to your iPads using your MDM software.

Preparing the iPad for Testing without MDM Software

To install and register the INSIGHT App manually on a single iPad without MDM software, as part of step 1b, manually download the INSIGHT App from the Apple App Store by performing the following steps:

1b1. On your iPad, launch the Apple App Store.

Preparing the iPad for Testing (cont.)

1b2. Search for DRC Insight.

1b3. When you locate the INSIGHT App, select **Get** to download it.

2. Pair an External Keyboard

To use an external keyboard (required for WIDA), manually pair each iPad device with an external keyboard.

Note: Both wired and wireless keyboards are supported for testing.

3. Launch the DRC INSIGHT App

For the INSIGHT App version 8.0, INSIGHT is automatically placed in Guided Access mode regardless of whether you use MDM software to deploy it. When INSIGHT launches, you are prompted to lock INSIGHT in Single App Mode. Select **Yes** for Single App Mode. If you select No, you are prompted to turn on Guided Access.



3a. With a Configuration File

When you launch DRC INSIGHT, the iPad device is automatically registered with INSIGHT. If a single assessment is configured, the main INSIGHT page appears. If multiple assessments are configured, you can select an assessment.

3b. Without a Configuration File

When you launch DRC INSIGHT, the iPad device is not automatically registered with INSIGHT. A field appears that requests the ORG Unit ID for the device. Enter the ID(s) in the field and click **Save** to request the Central Office Services - Device Toolkit ORG Unit ID and register the iPad

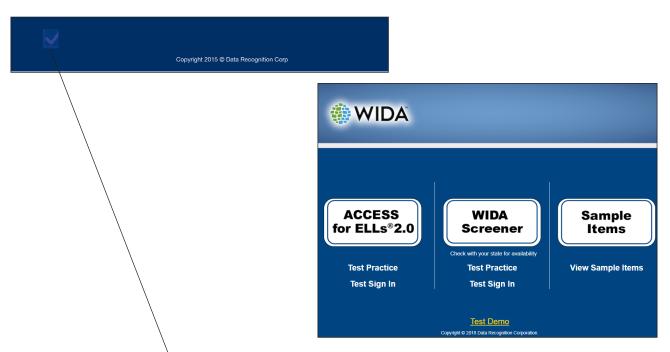
If a single assessment is configured, the main INSIGHT page for that assessment appears. If multiple assessments are configured, you can select an assessment from a list.

Viewing the DRC INSIGHT Configuration on an iPad

You can view the iPad's INSIGHT configuration from the System Information page that appears when you start the System Readiness Check on an iPad.



1. Press **DRC INSIGHT** to start INSIGHT.

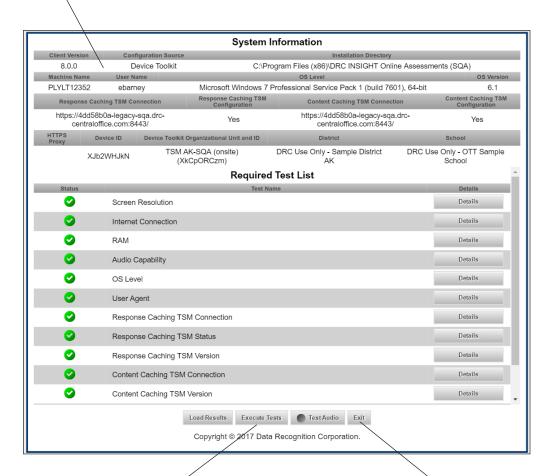


2. When INSIGHT appears, press the System Readiness Check checkmark link [✓] in the lower left corner and enter the four-digit System Readiness Check Access Code (7745) from the Central Office Services - Device Toolkit to display the System Information page.

Note: Within the INSIGHT App, you can try the Test Practice or Test Demo, view sample test items, or sign in to take a test.

Viewing DRC INSIGHT Properties on an iPad (cont.)

3. You can view your INSIGHT configuration. This information is read-only.



4. Click **Execute Tests** to verify that the iPad is ready for testing. If there are errors, you must resolve them and repeat steps 3 and 4. To make configuration changes, you must use the Central Office Services - Device Toolkit.

5. If your iPad is ready for testing, click **Exit**. To use an external keyboard (required for WIDA), pair the iPad with a keyboard and relaunch the DRC INSIGHT App.

Installing INSIGHT on Chromebook Devices

■ What's Covered in This Section

This section describes the INSIGHT installation and configuration process for Chromebook devices. It provides detailed information about installing INSIGHT and configuring it using the Central Office Services - Device Toolkit.

DRC provides software called the Central Office Services - Device Toolkit

that you can use to configure and install the TSM with the Chromebook devices in your environment. You use this software after you have registered your Chromebook devices in your Google domain account (for more information about registering Chromebook devices, see https://support.google.com/a/answer/182433).

The following is an overview of the process of installing, configuring, deploying, and registering INSIGHT on your Chromebook devices.

The following is an overview of the process of installing, configuring, deploying, and registering INSIGHT on your Chromebook devices. Basically, you set up Central Office Services configurations using the Central Office Services - Device Toolkit, generate a chromeos.json file, and install and deploy INSIGHT. When you start INSIGHT, the Chromebook device is registered with INSIGHT through the Central Office Services - Device Toolkit configuration.

- 1. Use the DRC Central Office Services Device Toolkit to create ORG Units
- 2. Use Chrome device management to install and deploy INSIGHT and the chromeos.json file to your Chromebook devices. The INSIGHT App is installed as a Kiosk application the next time the policy is reloaded based on your site's settings. To deploy the INSIGHT App immediately, enter **chrome://policy** in the address bar of the Chromebook device and click **Reload policies**.
- **3.** After INSIGHT is deployed, start it on each Chromebook device to register the device.

To test using INSIGHT, you can connect to a TSM for content caching, response caching, load simulation testing, and other functions. The following is a brief overview of the process of installing INSIGHT and configuring a Chromebook.

- 1. To use a TSM, install one or more TSMs on desktop or laptop computers that have static IP addresses (if you use the machine's IP address to connect to the TSM) and will be available around the clock.
- 2. Sign in to the WIDA Assessment Management System (WIDA AMS) using a supported browser (see *Volume III: Configuring Devices for Testing*) and use the Central Office Services Device Toolkit link to start the DRC INSIGHT Central Office Services Device Toolkit.

■ Setting Up INSIGHT on Chromebook Devices

INSIGHT Deployment Overview

INSIGHT Installation Overview

Installing INSIGHT on Chromebook Devices

INSIGHT Installation Overview (cont.)

Chromebook Devices, the TSM, and INSIGHT

Multiple Testing Programs

- **3.** Use the DRC INSIGHT Central Office Services Device Toolkit to organize and configure your Chromebook devices by performing the following tasks:
 - Create configurations based on your testing setup and needs; and group the Chromebook devices into the configurations.
 - Specify the connection for a TSM for all of the devices in the configuration.
 - Check the contents of the log files during testing to monitor testing and Chromebook activity and make any configuration changes.
- **4.** Use the URL DRC provides to install the DRC INSIGHT App on your Chromebook devices from the Google administration website.
- **5.** Using Chrome management, upload the chromeos.json file that you generated from the Central Office Services Device Toolkit.
- **6.** Launch INSIGHT on the Chromebook. Run the System Readiness Check to verify that the Chromebook device can connect to the TSM and is ready for testing. If necessary, use the Central Office Services Device Toolkit to reconfigure the configuration and restart the DRC INSIGHT software to update the device's configuration.
- 7. Test the configurations and monitor the log files for issues.

A TSM is used primarily to cache and manage test content and Writing test responses. For various reasons, Chromebook devices do not provide a suitable environment for a TSM. As a result, you must install the TSM software on aWindows, Mac (OS X and macOS), or Linux computer, and connect to the TSM when you install INSIGHT on the Chromebook. For TSM installation instructions, refer to *Volume II: Testing Site Manager (TSM)*. For TSM connection instructions, refer to *Volume III: Configuring Devices for Testing*.

(!) Important: Verify that the maximum number of Chromebook devices in any Chrome management subgroup does not exceed 150. If you attempt to test using a single TSM with more than 150 devices the results are unpredictable.

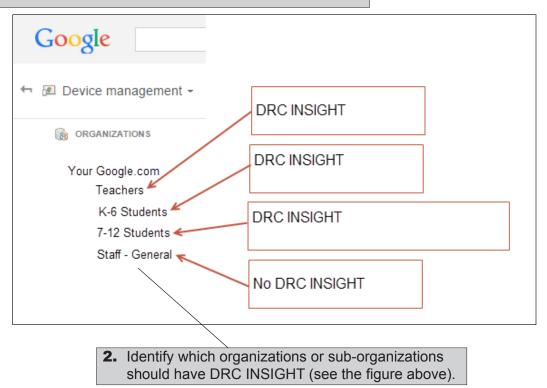
You can use INSIGHT to access multiple testing programs (for example, ACCESS for ELLs 2.0 and your state-specific testing program) from the same device. You access these testing programs using the same DRC INSIGHT desktop shortcut. When you start INSIGHT, a page appears that lists the different testing programs from which you can select.

Example of Chromebook Device Setup and Configuration for INSIGHT

The following is a high-level example of how to set up your Chromebook environment in Google to complement DRC INSIGHT and Single App Kiosk Mode. DRC assumes that users have registered their Chromebook devices as part of their initial implementation. For secure testing, Google specifies that the user must get Chrome device management software for each Chrome device and enroll each Chrome device in the school's domain.

! Important: The instructions in this section assume that you have already set up your Chrome environment using the Chrome device management. The details of this process are outside the scope of this documentation. For more information, see https://support.google.com/chrome/a and *Chromebook Questions in Volume V: Troubleshooting*.

1. Log in to your Google Admin account at admin.google.com.



3. Enroll Chromebook devices and identify each device by the device's serial number. You can add notes to help identify the device (see the example below).

Device Serial Number YH4B922AB01005R Notes: Chromebook assigned to Sample School, Grade 4, Asset number 12345

4. Move the Chromebook devices to the appropriate sub-organizations.

Note: The Chromebook's serial number is not the same as the Chromebook Device ID that the Central Office Services - Device Toolkit creates (see *Volume III: Configuring Devices for Testing*).

Quick Tour: Installing INSIGHT for Chrome

This Quick Tour describes how to install the DRC INSIGHT App on one or more Chromebook devices using the Central Office Services - Device Toolkit and the Google administration site.

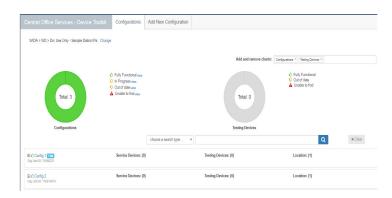
① Important: You must have a Google Chrome Administrator profile to install the DRC INSIGHT App.

If you plan to use Chromebook devices that were previously registered with the Central Office Services - Device Toolkit, and the Central Office Services - Device Toolkit configurations and Device IDs are still applicable, you do not need to follow this process and re-register your Chromebook devices with the Central Office Services - Device Toolkit. When INSIGHT is launched, it will locate the Device ID from the Device Toolkit and use the associated configuration.

- You must deploy the DRC INSIGHT configurations to each Chromebook device being used for testing by using the DRC Central Office Services Device Toolkit. To start the Central Office Services Device Toolkit software and register the Chromebook device, sign in to WIDA AMS at https://wida-ams.us using a supported browser, open the All Applications menu bar, and select Device Toolkit.
- 2. The Central Office Services Device Toolkit software appears in your browser. Use this software to create configurations to group, organize, and categorize your Chromebook devices for testing. When you launch the Chromebook, it uses the settings identified for the configuration to which the device is assigned (see *Volume III: Configuring Devices for Testing*).
- **3.** Select a Testing Program from the drop-down menu and a site (district or school) using the field. The Central Office Service Device Toolkit dashboard appears (see *Volume III: Configuring Devices for Testing*).

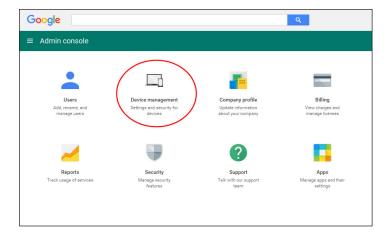




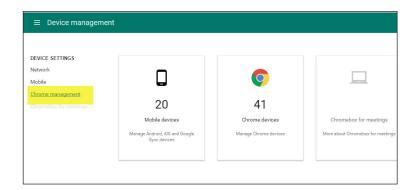


Quick Tour: Installing INSIGHT for Chrome (cont.)

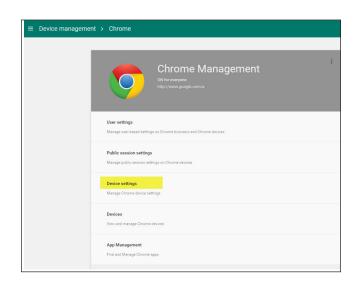
4. Using a Web browser that Google supports (see https://support.google.com/a/#topic=29157), navigate to the Google administration site at http://admin.google.com, log in with an administrator profile, and select Device management.



5. Select Chrome management.



6. Select **Device settings**.



Quick Tour : Installing INSIGHT for Chrome (cont.)

7. The Device Settings page appears (for substeps 1–5, refer to the circled numbers in the figures).

Select the proper organization level to be able to deploy the DRC INSIGHT App to everyone who will use it for testing.

Note: Where the example shows drc-education. com, your domain will be listed.

Verify that the setting for Release Channel is **Move to Stable Channel** (the default value).

(!) Important: This setting prevents development or beta versions of software being distributed to your Chromebook devices during a Google Chrome update process.

3 For Auto-Launch Kiosk App, leave the value as **None** so the user can use the Chromebook device for non-DRC INSIGHT testing.

Scroll up the page to User Data and select **Do** not erase all local user data.

Scroll down the page and click **Manage Kiosk Applications**.

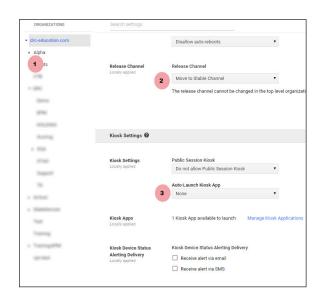
- **8.** The Kiosk Apps page appears (for substeps 1–4, refer to the circled numbers in the figure).
 - Click **Specify a Custom APP** and Enter the ID and URL for the DRC INSIGHT App (required).

Note: The Chromebook installation file (ChromeAppIDInfo.txt) contains the ID and URL. To download the file, log in to WIDA AMS, select **General Information–Technology Downloads**, and download the file for the Chromebook platform.

2 Click Add.

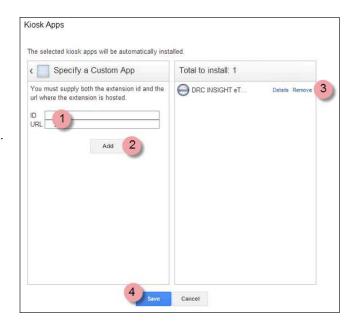
3 The screen refreshes and the DRC INSIGHT App icon appears in the Total to install list.

Click **Save**. Verify that the changes are saved on the Device Settings page.









Chrome Management

Quick Tour: Installing INSIGHT for Chrome (cont.)

Use the Chrome management App
 Management feature to upload the chromeos.
 json file.

10. Launch the DRC INSIGHT App by selecting the string next to the icon (above the arrow).



- 11. Navigate to **Kiosk settings** and locate the Chrome organizational unit containing the device you want to configure.
- 12. Click Override under Setting Inherited to search for and upload the chromeos.json file you generated from the Central Office Services Device Toolkit, verify that Install automatically is enabled, and click Save. The Device Settings page reappears. Click Save Change.

Note: Be sure to upload only the chromeos.json file, not the entire deployment.zip folder. For examples of the chromeos.json file and how to download it, see "Example Deployment File Templates" on page 130 and "Creating Deployment Files for Testing Devices" on page 151.

The INSIGHT App will be installed as a Kiosk application the next time the policy is reloaded, based on your site's settings. To reload device policy updates to the INSIGHT App immediately, enter **chrome://policy** in the address bar of the Chromebook device and click **Reload policies**.





Quick Tour: Installing INSIGHT for Chrome (cont.)

13. You are ready to register the device and start testing. To start INSIGHT, start the Chromebook device and do not log in to any Google accounts.

(!) Important: If a user logs in to the Chromebook device using a Google account, they will not see the DRC INSIGHT App. The DRC INSIGHT App runs in Single App Kiosk Mode, which means that the user cannot access any other application until they exit INSIGHT.

Click **App** from the Chromebook device sign-in screen, and click **DRC INSIGHT** to display the main page. If the device successfully registers with INSIGHT, skip to step 18.

- 14. If the device did not successfully register with INSIGHT and the Configuration Not Found page appears, you need to locate the device's ORG Unit ID from the Central Office Services Device Toolkit. When you have the ORG Unit ID, click Assign Device to ORG Unit.
- 15. When the Device Registration page appears, enter the device's ORG Unit ID from the Central Office Services Device Toolkit (or copy and paste it from the Central Office Services Device Toolkit) and click Add. When the Register button is enabled, click Register. When the device registers, the System Readiness check appears.

Note: If the configuration points to more than one testing program, a page appears that you can use to select your testing program. When the device registers, the System Readiness check will appear for the testing program you selected.







Quick Tour: Installing INSIGHT for Chrome (cont.)

16. When the System Readiness Check launches, the System Information screen appears. You can see details about each System Readiness Check test, execute the tests, and view the results.

Click **Execute Tests** to verify that the testing computer and any TSM(s) are configured correctly. Click **Details** next to any test you need more information about (see "The System Readiness Required Tests" on page 228). When ready, click **Exit**.

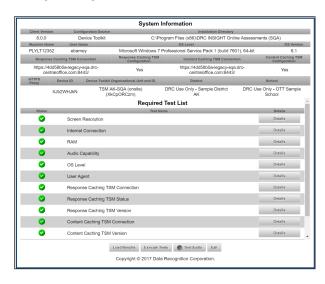
17. When the device is successfully registered with INSIGHT, one of two pages appears.

If a single testing program (location) is associated with the configuration, the main testing page appears. If multiple testing programs are associated with the configuration, a page appears that you can use to select the testing program. After you make your selection, the main testing page appears.

18. Within the INSIGHT App, you can try the Test Practice or Test Demo, view sample test items, or sign in to take a test.

Note: You can retrieve the Chromebook's Device ID by from the System Readiness Check by clicking the checkmark [] link in the lower left side and entering the four-digit passcode of 7745 (available in the Central Office Services - Device Toolkit—see *Volume III: Configuring Devices for Testing*). for more information, see "Using the System Readiness Check on a Chromebook" on page 220.

(!) Important: When you launch INSIGHT for the first time, the DRC INSIGHT App uses the Chromebook device's ORG Unit ID to associate the Chromebook device with its INSIGHT configuration and register the device.



Select a testing program:

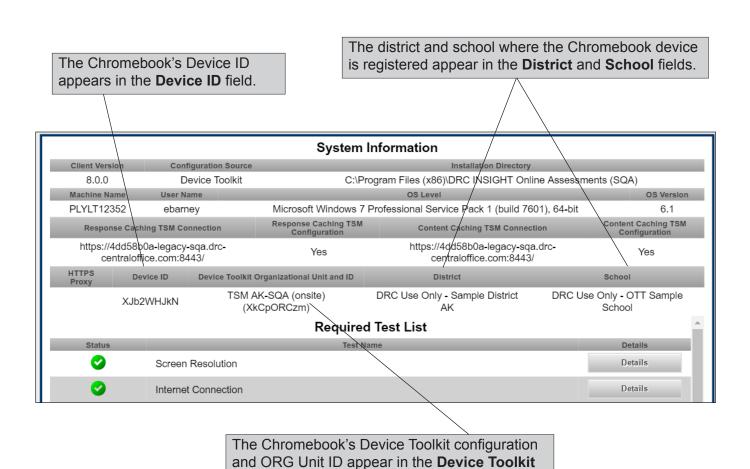
Testing Program A
Testing Program B



System Readiness Check
Access Code:7745

Using the System Readiness Check on a Chromebook

When you start the System Readiness Check on a Chromebook, the Device ID and Central Office Services - Device Toolkit configuration and ORG Unit ID appears in the header fields on the System Information page (see the figure below).



Organizational Unit and ID field.

The System Readiness Check

What's Covered in This Section

■ Starting the System Readiness Check

This section discusses how to use the System Readiness Check to help you troubleshoot issues that might occur during INSIGHT installation or when INSIGHT is running.

The System Readiness Check is installed when you install INSIGHT and performs a series of tests you can use to diagnose and prevent or correct most errors easily. It verifies that a testing device meets all of the necessary hardware and software requirements for testing. It also indicates any checks that the testing device failed and provides suggestions for success.

To start the System Readiness Check from a device, do the following:

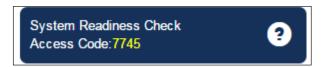
1. Start INSIGHT on the device (the Windows INSIGHT shortcut is shown below).



2. When the portal page appears, click the checkmark [✓] in the lower left side of the INSIGHT portal page.

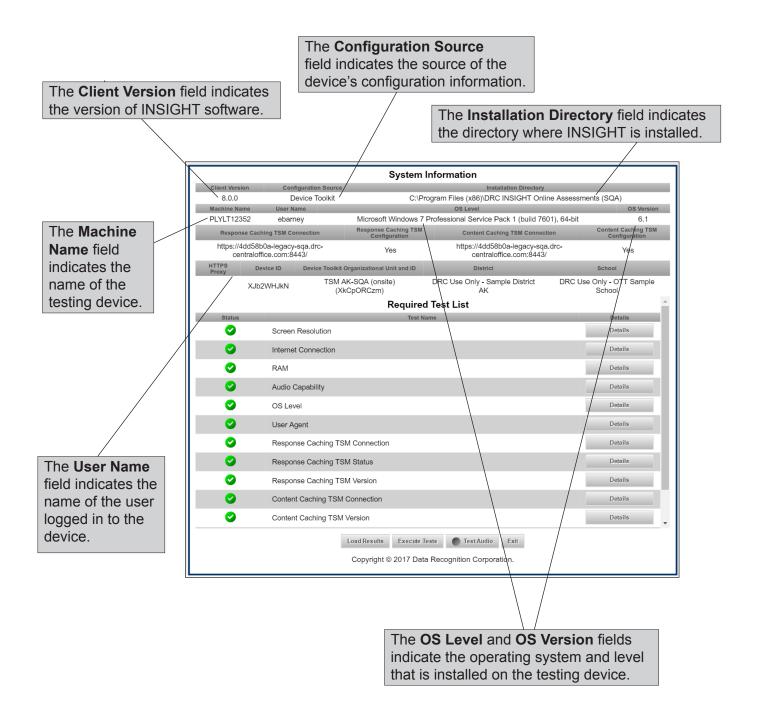


3. When you are prompted, enter the four-digit System Readiness Check Access Code of **7745** (available in the Central Office Services - Device Toolkit—see *Volume III: Configuring Devices for Testing*).

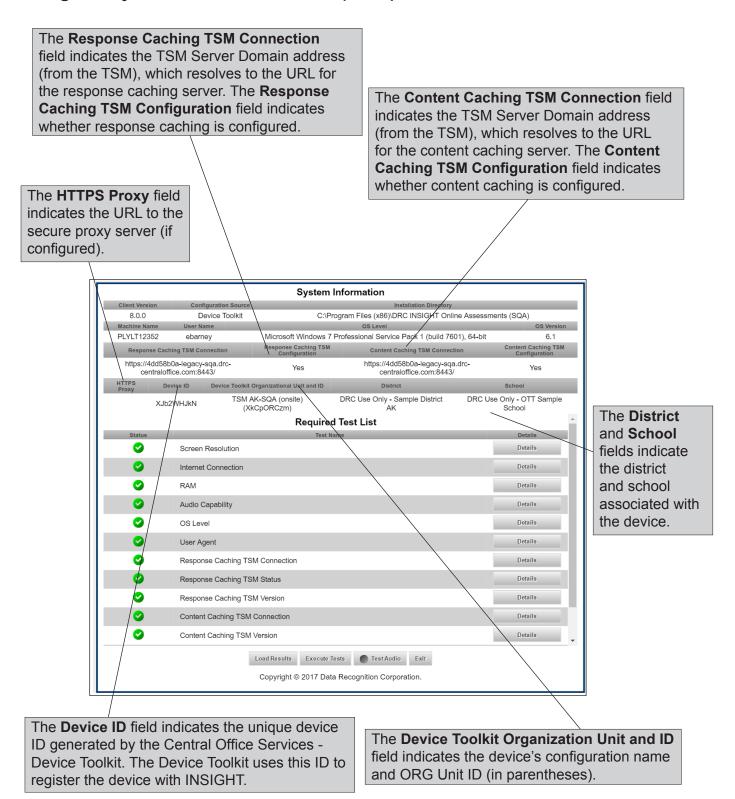


Using the System Readiness Check

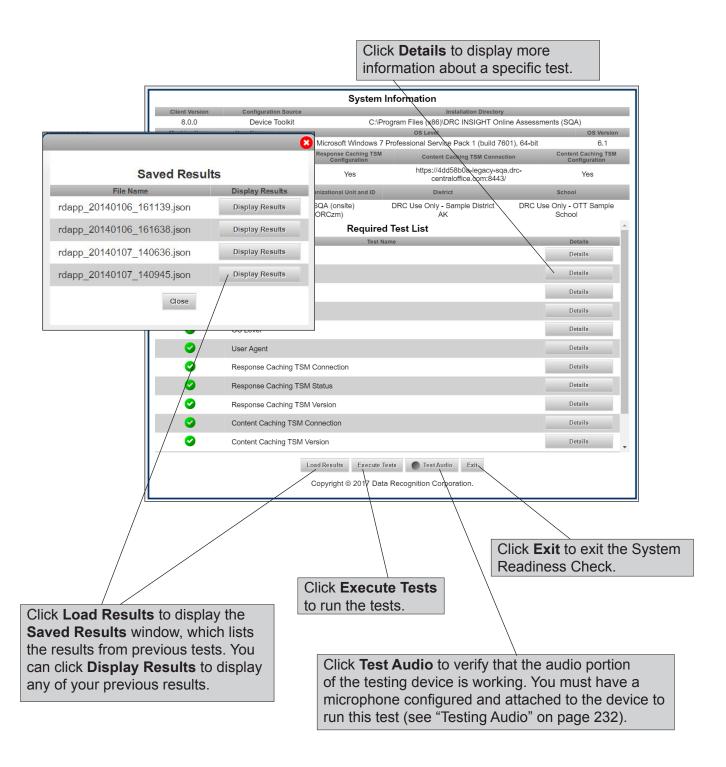
After installing INSIGHT, use the System Readiness Check to determine whether your testing device meets system requirements and to troubleshoot issues. When you start the System Readiness Check from a device, the System Information page displays information about the device's software and configuration.



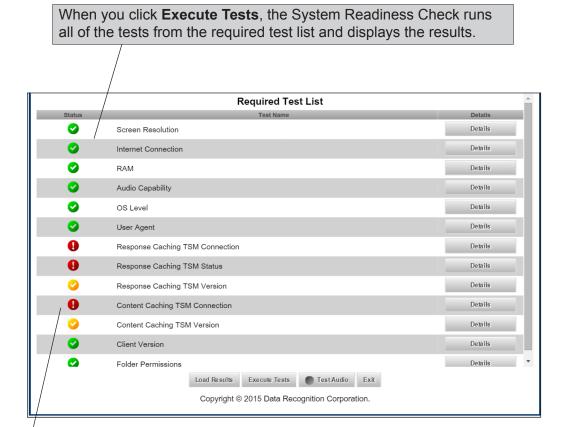
Using the System Readiness Check (cont.)



Using the System Readiness Check (cont.)



Using the System Readiness Check (cont.)



Various icons indicate the status of a system readiness test.

- A green check mark icon () indicates that the testing device passed the test.
- A red exclamation point icon () indicates that the testing device failed the test.
- A yellow check mark icon () indicates that the status of the items checked requires further review.
- A grey icon () indicates that the test is not applicable to the configuration.

Note: DRC strongly recommends content caching for WIDA testing. If content caching is configured, the content caching icons should be green. Response caching icons can be green or gray because response caching is optional for WIDA testing.

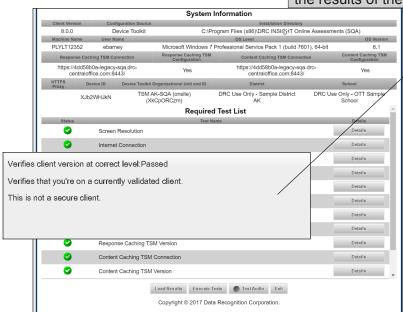
When you click **Details** before you

Using the System Readiness Check (cont.)

You can display details about the System Readiness Check before and after the tests. For a description of these tests, see "The System Readiness Required Tests" on page 228.

execute a test, a window displays a description of the test. System Information C:\Program Files (x86)\DRC INSIGHT Online Assessments (SQA) Machine Name User Name PLYLT12352 Microsoft Windows 7 Professional Service Pack 1 (build 7601), 64-bit Response Caching TSM Content Caching TSM Connection Response Caching TSM Connection https://4dd58b0a-legacy-sqa.drc-centraloffice.com:8443/ https://4dd58b0a-legacy-sqa.drc-centraloffice.com:8443/ HTTPS Device ID Device Toolkit Organizational Unit and ID TSM AK-SQA (onsite) (XkCpORCzm) DRC Use Only - Sample District DRC Use Only - OTT Sample School Required Test List Verifies client version at correct level:Failed Verifies that you're on a currently validated client. The client major version is incorrect, please update Content Caching TSM Version Load Results Execute Tests Test Audio Exit Copyright @ 2017 Data Recognition Corporation.

When you click **Details** after you execute a test, a window displays the results of the test.



The System Readiness Required Tests

The System Readiness Check performs a series of required tests to determine whether a device is ready for online testing. The following table describes each test and the minimum requirements to pass the test.

Test	Description	Required to Pass	
Audio Capability	Verifies that the device has the audio capability needed for online testing and tutorials.	The device must have one or more audio channels and be able to play MP3 audio files	
Client Version	Verifies that the version of the client software will work with the secure browser	The base level of the client software must be up to date	
Content Caching TSM Connection	Verifies that the INSIGHT test engine software on the testing device can connect to the TSM content caching server	The connection to the TSM content caching server must be working Note: DRC strongly recommends content caching for WIDA testing.	
Content Caching TSM Version	Verifies that the version of the TSM content caching server is the most recent	The TSM content caching server must be the latest version	
Folder Permissions	Verifies that you have permission to read and write to the installation folder	Read/write access to the installation folder	
Internet Connection	Verifies that the device is connected to the Internet and that the connection speed is fast enough for testing	The device and browser must have a ping (connection) time of no more than 250 milliseconds	
OS Level	Verifies that the operating system is supported and is at a level required for online testing.	See the Supported System Requirements for ACCESS for ELLs 2.0 and Screener for the supported operating systems.	
RAM	Verifies that the device has enough memory for online testing	512 MB of RAM.	
Response Caching TSM Connection	Verifies that the INSIGHT test engine software on the testing device can connect to the TSM response caching server	The connection to the TSM response caching server must be working Note: Response caching is optional for WIDA testing.	
Response Caching TSM Status	Verifies that the TSM contains no unsent student responses	The TSM must contain no stored responses	
Response Caching TSM Version	Verifies that the version of the TSM response caching server is the most recent	The TSM response caching server must be the latest version	
Screen Resolution	Verifies that the screen width and height are sufficient to display the online tests	A minimum screen size of 1024 x 768 pixels	
User Agent	Verifies that the Web browser will work for the unsecured Practice Tests	An up-to-date Chrome browser is required	

Resolving System Readiness Required Tests

This section describes various issues you may experience when you run the System Readiness Check tests. It also describes the steps to take to resolve these issues.

Issue 1. Screen Resolution Error

This test verifies that the screen width and height settings meet the minimum system requirements. If it fails, the device's resolution is not high enough to meet the minimum system requirements. You must change the screen resolution (see the *Supported System Requirements for ACCESS for ELLs 2.0 and Screener* for the supported resolutions).

Issue 2. Internet Connectivity Error

The testing device cannot reach the DRC servers through the Internet. This issue is usually a firewall or proxy issue. Make sure that everything is whitelisted correctly (see *Network Requirements for Testing Computers* in *Volume I: Introduction to Online Testing*).

Starting or Running the System Readiness Check

If the error occurs when you are starting or running the System Readiness Check, do the following:

- 1. Verify that you have no bandwidth issues and that you can reach the DRC servers.
- **2.** Verify the proxy settings. The Windows environment does not always capture proxy settings correctly. Usually, Windows uses the Internet Explorer Internet settings.
- **3.** Verify that you have all of the DRC addresses whitelisted.
- **4.** Contact your Internet Service Provider and verify that it is not filtering or throttling your connection with DRC.

Issue 3. RAM Error

This test verifies that the amount of the device's total memory meets the minimum system requirements. If this test fails, you must upgrade the amount of memory in the device to meet the minimum system requirements.

Issue 4. Audio Capability Error

This test verifies that the device has the audio capability needed for online testing and/or test demos. If this test fails, verify that the device's sound card is working and that the device has a valid playback device.

Issue 5. OS Level Error

This test verifies that INSIGHT is running on a supported operating system. If the device is running a supported operating system, the test verifies that your setup meets the minimum system requirements. In addition to supported versus unsupported operating systems warnings, there is also a warning if the device is using an untested version of a supported OS.

Resolving System Readiness Required Tests (cont.)

Issue 6. User Agent Error

This test verifies that the Web browser is correct for online testing.

Issue 7. TSM Connection Error

The device is configured to use the TSM, but cannot connect to the TSM. All of the devices that use the TSM server must be able to connect to the TSM.

① Important: The two most common reasons for TSM connectivity issues are difficulty translating the server name into an IP address and not excluding the TSM from the system firewall on the device where the TSM is installed. Verify that the DNS will resolve to the correct IP address of the TSM machine. If not, contact the person who manages the DNS settings in your district.

You Are Using a TSM

- Start the System Readiness Check and verify that the TSM server settings are correct. If they are not correct, do the following:
 - **a.** Use the Central Office Services Device Toolkit to edit the settings (see *Volume III: Configuring Devices for Testing*).
 - **b.** Click **Update Configuration** to save your changes.
 - c. Restart INSIGHT.
- Verify that the TSM service is running.
- Verify that the TSM is reachable. Open the TSM both on the computer where the TSM is installed and on some of the devices that are receiving the error.
- Make sure that any antivirus/firewall/proxy between, or on, the client and server is open. Also, ensure that both the testing client and the TSM are whitelisted.

Note: See *Network Requirements for Testing Computers* in *Volume I: Introduction to Online Testing* to verify what should be allowed, whitelisted, and unblocked.

- Try setting the proxy settings manually.
- Verify that no other Web servers are running. Check whether a Virtual Machine (VM) is being used to
 host the TSM. Make sure no other VMs on the server are running a Web server on ports 8080 or 8443
 (or whatever ports you used when you set up the TSM).

Resolving System Readiness Required Tests (cont.)

Issue 8. TSM Response Caching Error

The TSM server has not transmitted all of its stored responses. This test fails if there are stored student responses that have not been transmitted.

Note: Students cannot log in if there are stored responses in the TSM.

- 1. Start the TSM.
- 2. Select Response Caching-Unsent Responses.
- 3. Verify whether there are unsent tests and click **Transmit Responses** if there are.

Issue 9. TSM Version Error

The TSM is not the latest version. You must uninstall the old version and install the latest version.

- 1. Uninstall the TSM (see *Volume II: Testing Site Manager (TSM)*) and verify that it was uninstalled correctly.
- 2. Install the TSM from the WIDA Assessment Management System (see *Volume II: Testing Site Manager (TSM)*).
- **3**. Rerun the System Readiness Check (see "Using the System Readiness Check" on page 223) to verify that the TSM is the latest version.

Issue 10. Client Version Error

The client software (INSIGHT) is not the latest version. You must download the latest version (if you are prompted to update your software, click **Update**).

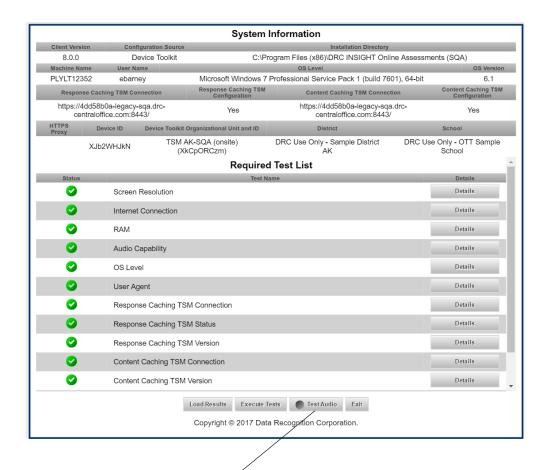
Testing Audio

Use the System Readiness Check Test Audio test to determine whether the testing device is configured correctly for the audio portion of online testing. The testing device must meet the following audio requirements:

- The device must have one or more audio channels.
- The device must be able to play MP3 audio files.
- The device must have a microphone installed.

Note: Only one microphone should be enabled on the student's device during testing.

• The microphone and any peripheral devices must be able to capture and record audio at an 8-bit, 22 khz sample rate or higher to ensure reasonable recording quality and playback results.

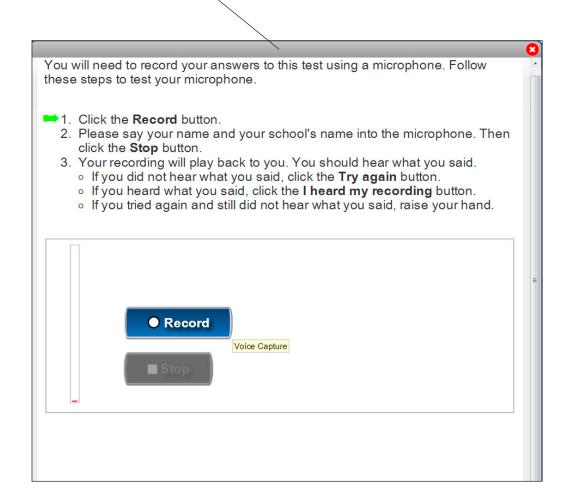


Click **Test Audio** to verify that the audio portion of the testing device is working. You must have a microphone configured and attached to the device to run this test.

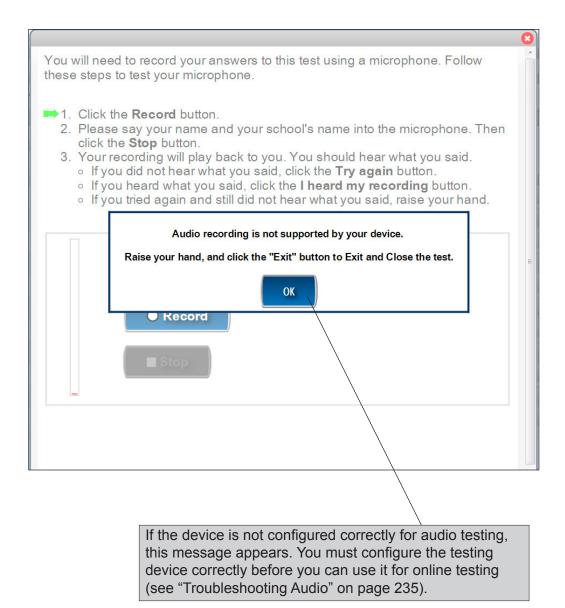
Testing Audio (cont.)

If the device is configured correctly for audio testing, the following page appears. Follow the directions and use the device's microphone to verify that you can record testing information correctly.

Note: Students will complete this same test at the start of the speaking assessment.



Testing Audio (cont.)

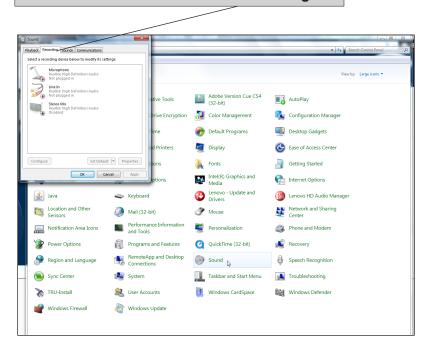


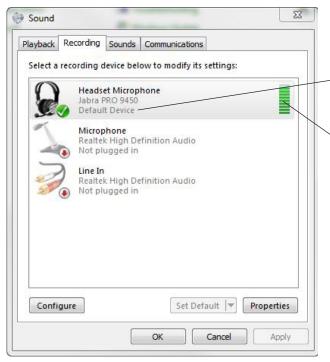
Troubleshooting Audio

If a testing device is not passing the System Readiness Check Test Audio test, try performing some or all of the following steps to troubleshoot the situation.

Windows Part I: Verify that the microphone is plugged in and set up for the device.

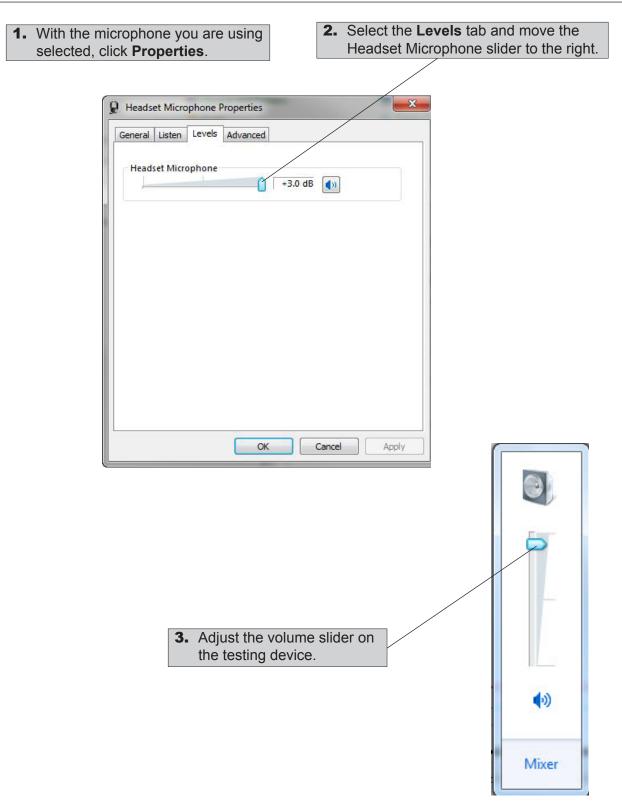
1. On a Windows computer, select Control Panel–Sound and select the Recording tab.





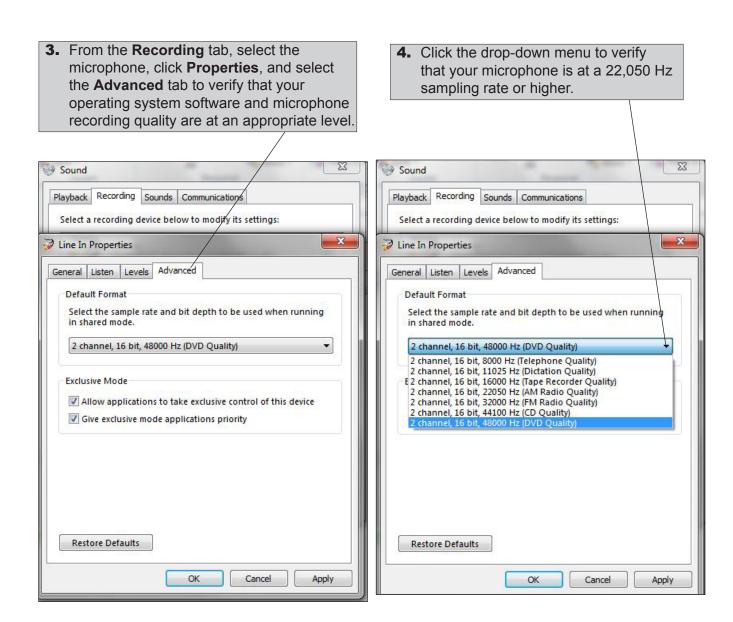
- 2. Verify that the microphone you are using is the default device. If it is not the default device, select it, right-click, and select Set as Default Device.
- 3. Verify that the microphone is picking up sound. The level bar should fill in with green as the microphone picks up louder input.

Windows Part II: Adjust the volume on the headset and the testing device.



Windows Part III: Uninstall and reinstall drivers and software.

- **1.** Go to your microphone vendor's website and try uninstalling and reinstalling the microphone's drivers and other software.
- **2.** Try updating your computer's microphone drivers.

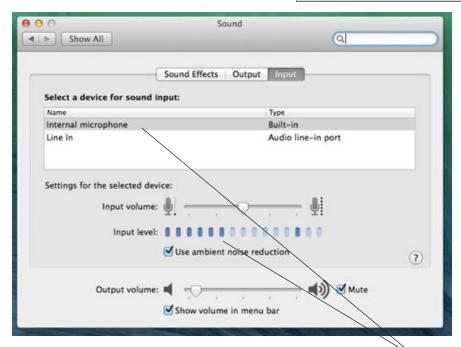


Mac (OS X/macOS) Part I: Verify that a microphone is plugged in and set up for the Mac.

1. On a Mac computer, hold down the **Option** button and click the **Speaker** icon in the toolbar.



2. From the drop-down menu that appears, select **Sound Preferences...**.



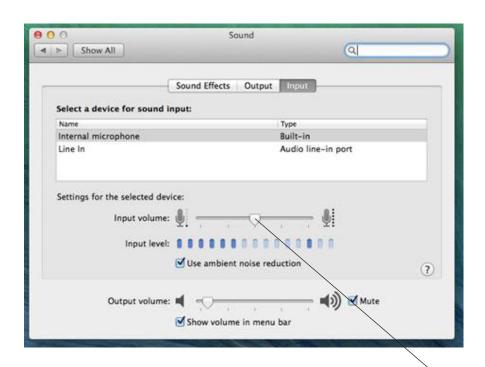
3. Verify that your microphone is selected and that the Input level bars fill as you talk into the microphone.

Mac (OS X/macOS) Part II: Adjust the volume.

1. On a Mac computer, hold down the **Option** button and click the **Speaker** icon in the toolbar.



2. From the drop-down menu that appears, select **Sound Preferences...**.



3. Move the Input volume slider to the right to increase the input volume.

Volume V: Troubleshooting

Introduction

Introduction

About This Guide

This user guide is part of a multi-volume set that describes how to configure, install, manage, and troubleshoot the DRC INSIGHT Online Learning System, or DRC INSIGHT. This volume, *Volume V: Troubleshooting*, describes tools and testing information to help you troubleshoot your testing environment and verify that it is ready for testing.

This guide discusses how to use some of the testing tools, including Test Practice and the Monitor Verification Test. In addition, the guide explains the various error messages that you may encounter while working with the Testing Site Manager (TSM), the Central Office Services - Device Toolkit, and INSIGHT, and it provides information to help resolve them. This guide also describes the Capacity Estimator and contains Frequently Asked Questions (FAQs), Hints and Tips for online testing.

Important Information

(!) Important: Throughout this user guide, the Information icon (!) indicates important information or crucial tips.

Working with INSIGHT

Working with INSIGHT

What's Covered in This Section

Test Practice

The Monitor
Setting Verification
Test

The Capacity Estimator

This section describes Test Practice, the Monitor Setting Verification Test, and the Capacity Estimator. These are tools that you can use to help prepare for and become familiar with the online testing environment.

This topic describes the series of sample test directions and questions that introduce students to the testing tools and online testing environment.

This topic describes the Monitor Setting Verification test, which is available in WIDA Assessment Management System (WIDA AMS) and helps you determine whether the monitor settings for the testing computer are configured for optimal testing.

This topic describes the Capacity Estimator, a tool that you can download to help you estimate test loading times as well as the time required for a testing computer to save a test response and retrieve the next question.

Test Practice

Test Practice is a set of sample test questions that introduces students to the tools available during testing and prepares them for online assessments. This training allows students to try the features of the testing software before the actual test.

Test Practice is not designed to cover the test content: the goal is to instruct the student about using the testing application, not to assess skills. The Test Practice questions demonstrate the features of the testing environment and the Test Practice tests are not scored.

Testing Coordinators should review the Test Practice before the students begin the test administration. Test Administrators (TAs) should also review the Test Practice at least once. All students who will be testing online should have at least one opportunity to review the Test Practice for each domain for their grade-level cluster.

To try Test Practice, do the following:

- 1. The first step depends on the type of testing device.
 - From a Windows computer, select All Programs—DRC INSIGHT Online Assessments—DRC INSIGHT Online Assessments (or click the DRC INSIGHT Online Assessments desktop shortcut).
 - From a Mac (OS X or macOS), select Applications—DRC INSIGHT Online Assessments—DRC INSIGHT Online Assessments.app (or click the DRC INSIGHT Online Assessments desktop shortcut).
 - From a Linux computer, the first step also depends on the version of Linux.

For Linux versions 14.04 and 16.04, select opt/DRC INSIGHT Online Assessments/DRC INSIGHT Online Assessments.

For Linux versions 18.04, select opt/DRC INSIGHT Online Assessments/DRC INSIGHT Online Assessments, click the Show Applications button at the bottom left of the screen, and click the INSIGHT App.

- From an iPad device, press **DRC INSIGHT** to start the INSIGHT App.
- From a Chromebook device, click the INSIGHT App.
- 2. When INSIGHT launches, if you configured a single testing program, the main page for that testing program displays. If you configured more than one testing program, a page displays that you can use to select the testing program. After you make your selection, the main testing page displays. From the main testing page, click or select **Test Practice**.
- 3. Select a domain by clicking on it.
- **4.** Enter the username and password provided on the screen and click **Sign In**.
- 5. Follow the instructions on the screen to take the practice tests and use the test tools.

Note: There are no restrictions for accessing Test Practice. Students are allowed to access it as often as necessary.

The Monitor Setting Verification Test

You can access the Monitor Setting Verification test from the Technology Downloads page of the WIDA AMS by clicking **Monitor Setting Verification** (the test also displays after you sign in to start a test).

When you access the test, a screen similar to the one shown below displays to help you determine whether the monitor is set up correctly to display the online tests. If you do not see three shaded circles on the monitor display, a student testing will have difficulty answering some of the online questions. To resolve the problem, you must modify the brightness and/or contrast settings for the testing computer's monitor until three circles display clearly.

Use the image below to check if the computer screen is set up correctly. You should see three circles. If you do not clearly see three circles, please contact your district technology coordinator or reference the Monitor Settings section of the Technical User Guide. Close

Changing the Monitor's Contrast or Brightness

There are many ways to change the contrast or brightness of your display depending on the operating system, the computer, the graphics card, and the type of monitor you are using. The following are some ideas to try to change the contrast or brightness. For a specific hardware configuration, you also can try searching the Internet using a search such as *changing the contrast for operating system "x" or monitor "y."*

Windows Operating System

- On a laptop computer, look for a half-white/half-black circle on the keyboard. This function key changes the contrast.
- On a desktop computer, look for an option on the monitor or in the monitor menu to change the contrast and brightness.
- Identify the type of graphics card—NVIDIA, Intel, or ATI—and locate options for your graphics card from the Control Panel: **Control Panel—System Properties—**graphic cards tab.
- Locate a menu called Monitor Settings, Color, or Graphic Settings and change the contrast (be sure to check Advanced Settings). If you can't find a Contrast option, look for Gamma, Saturation, or Hue.
- Right-click on the desktop to bring up menu options for Intel and ATI cards.

Note: ATI's menu option is called Catalyst Control Center; Intel's option is called Intel Graphics Media Accelerator Driver.

• Select the folder **c:\Program Files**\graphics card, where graphics card is Intel, NVIDIA, or ATI.

Mac (OS X or macOS)

- To change the brightness, use the keyboard buttons or select Apple button—**System Preferences— Accessibility—Monitor** and use the Change the Brightness slider.
- To increase the contrast, use the following key combination:

• To decrease the contrast, use the following key combination:

Linux

For monitors for Linux desktop computers, check the settings in the Monitor menu options.

iPad Devices

For iPad devices, refer to your iPad documentation.

Chromebook Devices

For Chromebook devices, refer to the Google Chrome help or documentation.

■ The Capacity Estimator

The Capacity Estimator is an Excel spreadsheet file that you can download to estimate the following times:

- The time it will take to initially download the test engine based on the number of students testing.
 - The test engine is software that is automatically downloaded at the start of a test to help manage the delivery of the test.
- The time a student will wait for a test to load, plotted against the number of students who start testing at the same time.
- The time required for a student to receive the next test question, for both writing and non-writing tests, when the student is finished with a question (the time required for the testing computer to save the test response and retrieve the next question).

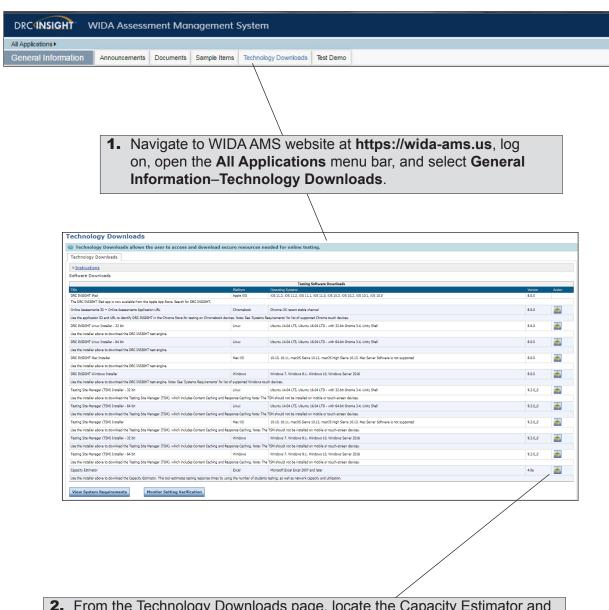
The following is a summary of the process of downloading and using the Capacity Estimator to estimate testing speeds:

- 1. Download the Capacity Estimator from the WIDA Assessment Management System (WIDA AMS).
- 2. Verify with your Internet Service Provider (ISP) or other technical source the ISP connection speed of the testing computer and your local area network (LAN) connection speed.
- **3.** In the Capacity Estimator, enter the number of students testing at the same time, the numbers from Step 2, and your estimate of the amount of bandwidth that is available for testing.
- **4.** Use the Capacity Estimator to review the results.

This process is discussed in detail on the following pages.

Using the Capacity Estimator

To download and use the Capacity Estimator to estimate your testing response times, perform the following steps from a computer you plan to use for testing.



2. From the Technology Downloads page, locate the Capacity Estimator and click the Download icon (). Depending on the browser you use, a dialog may display that you can use to specify a location to download the file.

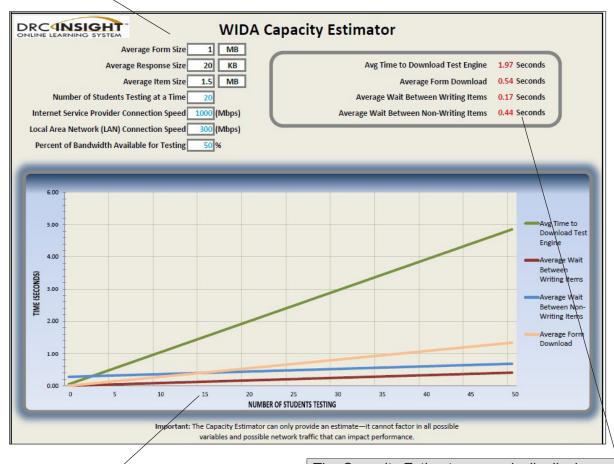
Using the Capacity Estimator (cont.)

3. Open the Capacity Estimator you downloaded in Steps 1 and 2, and enter the number of students who will start testing at the same time, the ISP connection speed, the LAN connection speed, and the percentage of bandwidth available for testing (use your best estimate—typically, 100% minus the amount being consumed by activities other than testing).

Note: You also can specify different values for the **Average Form Size**, **Average Response Size**, and **Average Item Size** fields. Use the following estimates for the average size of each test type.

Type of Test	<u>Domain</u>	Average Form Size	Average Response Size	Average Item Size
Fixed-Form	Writing (handwriting response)	1 MB	1 KB	1.5 MB
	Writing (keyboarding response)	1 MB	25 KB	1.5 MB
	Speaking	1 MB	1.5 MB (80 KB slices)	1.5 MB
Computer Adaptive Test (CAT)	Listening	1 MB	20 KB	1.5 MB
	Reading	1 MB	20 KB	1.5 MB

Note: As the complexity of test content and responses increases, more bandwidth is required.

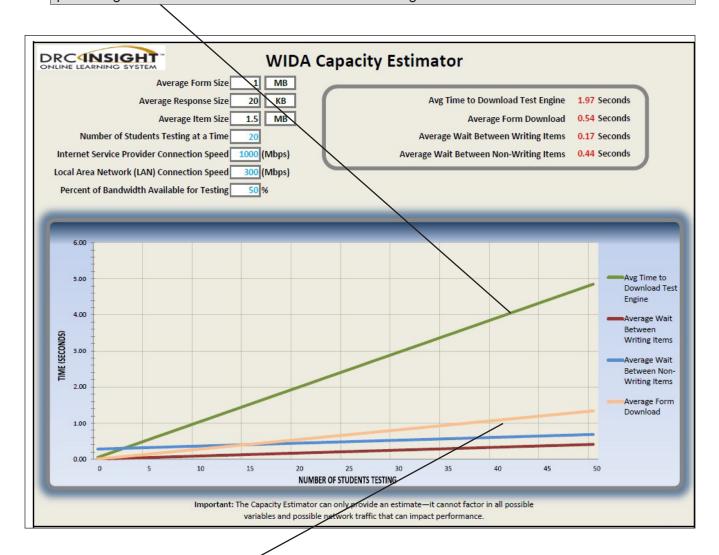


The Capacity Estimator displays the results graphically for up to fifty students.

The Capacity Estimator numerically displays information for all of the students testing (rounded to hundredths of a second) above the graph.

Using the Capacity Estimator (cont.)

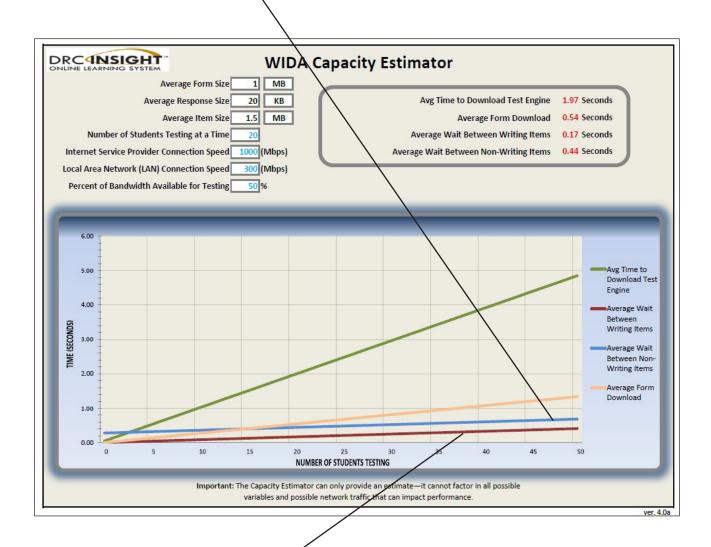
The dark green **Avg Time to Download Test Engine** line indicates the time (in seconds) a student will wait for the test engine to download as he or she logs in for testing. This time is plotted against the number of students who start testing at the same time.



The gold **Average Form Download** line indicates the time (in seconds) a student will wait for the a test to load after he or she clicks Select the Test. This time is plotted against the number of students who start testing at the same time.

Using the Capacity Estimator (cont.)

The blue **Average Wait Between Non-Writing Items** line indicates the time (in seconds) a student will wait for the next item in a non-writing test to load. This time is plotted against the number of students who start testing at the same time.



The red **Average Wait Between Writing Items** line indicates the time (in seconds) a student will wait for the next item in a writing test to load. This time is plotted against the number of students who start testing at the same time.

FAQs, Hints and Tips

What's Covered in This Section

This section contains a list of frequently asked questions (FAQs), as well as helpful hints and tips, regarding configuring, installing, and using DRC INSIGHT and the Testing Site Manager (TSM) software. The questions and answers are technical in nature and cover the following environments:

- Windows
- Macintosh (OS X or macOS)
- Linux
- iOS (iPad devices)
- Chrome OS (Chromebook devices)

The FAQs and Hints and Tips subsections are divided into various categories. In addition, the Common Technical Questions and Answers subsection covers the common technical support issues you may encounter and provides tips, techniques, and workarounds to resolve them.

General Questions

- Q1: Is the TSM in the Mac environment a true service that runs when no one is logged in to the server?
- A: It is a true service; it runs using the "Launchd" capability of OS X.
- Q2: If our TSM "goes down" or is unavailable, will a test automatically bypass the TSM, or are we stuck until the TSM is running again?
- A: If the TSM goes down, testing stops. If the computers are configured to use a TSM, the TSM must be available.
- Q3: Is there a way to provide failover TSM service or a quick way to redirect service if a server fails during the testing window?
- A: Because the TSM is configured using Central Office Services Device Toolkit configurations, it is possible to quickly switch TSMs if necessary. To do so, specify the location to the new TSM in the configuration using the Central Office Services Device Toolkit and restart INSIGHT on the device. When INSIGHT starts, it automatically uses the new TSM location.

O4: Do we use an .msi file for installation?

- A: The INSIGHT and TSM installation file types vary by operating system:
 - The Windows version uses an .exe file for the TSM and an .msi file for INSIGHT.
 - The Mac (OS X or macOS) version uses a .dmg file for the TSM and a .pkg file for INSIGHT.
 - The Linux version uses a .sh file for the TSM and a .deb file for INSIGHT.
 - The iOS version uses an App Store app and a .plist file for INSIGHT.
 - For Chrome, the INSIGHT App ID and URL is contained in a .txt file.

■ General Questions (cont.)

Q5: I removed the TSM and reinstalled it, but I still can't seem to use it. What should I do?

- A: Verify that the uninstallation process removed the TSM installation folder. On a Windows 7 machine (64-bit), the folder is C:\Program Files (x86)\TestingSiteManager. If this folder still exists after you remove the TSM, delete the folder before you reinstall the TSM.
- Q6: Do we have to have a TSM server in each school, or can it be on a shared district server? If so, which approach do you recommend?
- A: It depends on your network's capacity and reliability. With a dedicated TSM server you can offload about 50% of the traffic from the Internet to your TSM.

Because student computers need uninterrupted connectivity to the TSM, we recommend one TSM per school. But, you may be able to share a TSM if you have enough network capacity (see "The Capacity Estimator" on page 248).

Q7: Do we need to go to each student's computer to enable automatic updates?

A: No. Just remember to enable automatic updates when you configure the device in the Central Office Services - Device Toolkit (see *Configuring an ORG Unit TSM* and *Specifying INSIGHT Software Updates* in *Volume III: Configuring Devices for Testing*). After installation, INSIGHT automatically checks for software updates and installs them whenever it is launched.

Q8: How are test responses received?

- A: It depends on whether a TSM is installed and configured for response caching, which is only applicable to the Writing domain for WIDA.
 - If response caching is configured for the TSM, Writing test responses are sent to the TSM and then to DRC.
 - If response caching is not configured for the TSM, Writing test responses are sent directly to DRC.

■ General Questions (cont.)

Q9: How do I test that a TSM is working?

A: Start the System Readiness Check on a testing computer.

To confirm that the TSM is being used, do the following:

- 1. Verify that the TSM settings are showing up in the System Readiness Check.
- 2. Click Execute Tests in the System Readiness Check.
- **3.** For content caching, check the results for Content Caching TSM Connection, Content Caching TSM Status, and Content Caching TSM Version.

These results tell you whether the testing client is set up correctly to work with a TSM. Verify that a TSM is being used and check the test details for more information.

4. Click the desktop shortcut for **DRC Online Assessments**, select **Test Practice**, sign in, and take a training test to verify that you can connect to the TSM.

Q10: Can we install INSIGHT on one central server/computer and use shortcuts or other links to share it for testing across different machines?

A: No. DRC assumes that INSIGHT is installed on each computer that will be used for testing. Any other configuration is unsupported and may produce unexpected results.

Common Technical Questions and Answers

This section describes detailed resolutions to common technical support issues you may encounter, as well as tips, techniques, and workarounds to resolve them.

Question: How do I update test forms in a TSM?

To update your test forms, do the following:

1. Open the TSM by pasting the following URL into a browser:

https://localhost:8443/

Note: The string **localhost** only works in this URL if you are using a browser on the computer where the TSM is installed. To access the TSM remotely, change **localhost** to the IP address or server name of the computer where the TSM is installed.

- 2. If the status of any content changes to Out of Date, click the **Update Content** button.
- **3.** When an update starts, the Content Update page displays information regarding the update process. After you read the information, click **OK**.

It can take a while for the TSM to update. During the update, a progress bar displays to indicate the status of the update. Wait for the screen to refresh and all of the content to display the status **Up to Date**.

(!) Important: No testing should occur during the test content update process.

Common Technical Questions and Answers (cont.)

Question: Can we mass deploy DRC INSIGHT to all student computers?

Yes, but the details vary depending on which technology you use for deployment (make available for use) and the operating system to which you deploy the software. Basically, you can configure the installer using arguments when you deploy it in a non-interactive mode (also know as silent mode). For technical details, see Modifying the Setup File.

Modifying the Setup File

You can modify the DRC_INSIGHT_Setup.msi installation file to install your software on many machines using different installation settings. To modify the file, you need the ORCA installer package from the Windows SDK for Windows Installer Developers. This package is available at the following location:

https://docs.microsoft.com/en-us/windows/desktop/msi/orca-exe

After installing the Windows SDK Components for Windows Installer Developers, double-click on **Orca.msi** to install the Orca.exe file.

To modify the setup file, do the following:

- 1. Start Orca.
- 2. Select File-Open and open the MSI installer.
- **3.** Select **Property–Table** to open the Property table (see the figure below). Make all of your changes in this table.

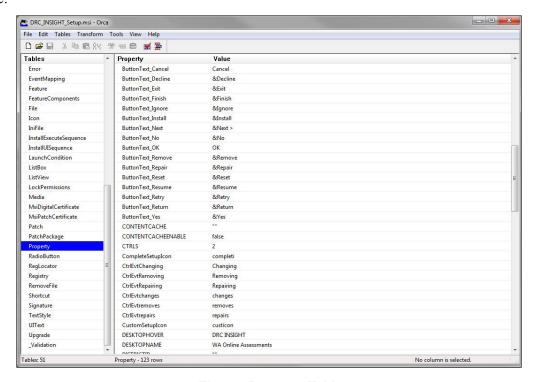
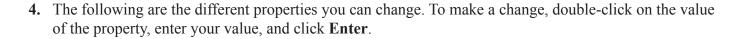


Figure: Property Table

Common Technical Questions and Answers (cont.)



(!) Important: Make sure that there are no spaces before your input. Do not put spaces in front of any attribute that you modify.

ouIds

This is the alphanumeric ORG Unit ID generated by the Central Office Services - Device Toolkit.

httpsproxy

This is the URL and secure port of the proxy host server. Depending on your configuration, this URL can start with either http:// or https://.

5. After you make your changes, save the file and overwrite the original DRC_INSIGHT_Setup.msi file.

Silent Install Example

The following example shows the syntax you would use to install INSIGHT silently (non-interactively) in Windows 7.*

DRC_INSIGHT_Setup.msi /qn

Silent Uninstall Example

The following example shows the syntax you would use to uninstall INSIGHT silently (non-interactively) in Windows 7.*

msiexec /x DRC_INSIGHT_Setup.msi /qn

*For Microsoft Windows 8, use /qb instead of /qn.

CapacityEstimatorQuestions

Q1: What is the Capacity Estimator?

- A: The Capacity Estimator is an Excel spreadsheet file designed to help districts and schools estimate the time it will take students to download tests initially and move to the next question after they send a response. These time estimates are based on the following:
 - The site's knowledge of the speed of their internal network
 - The calculated estimated speed of the external network connection to DRC
 - The estimated number of students testing concurrently and the estimated percentage of bandwidth available for use

This tool helps sites plan their testing more effectively based on factors such as the current network traffic, the number of students testing at the same time, and the type of test: writing or non-writing.

Q2: What does the Capacity Estimator estimate?

A: The Capacity Estimator estimates the following time values.

Value	Estimates
Avg Time to Download Test Engine	The average time the student will wait for INSIGHT to download as they log in for testing.
Avg Fixed Form Download without Content Caching	The average time required to download a fixed-form test without content caching.
Avg Fixed Form Download with Content Caching	The average time required to download a fixed-form test with a TSM and content caching.
Avg Wait Time Between Fixed Form Items	The average time required to save a response and load the next question for a fixed-form test.
Avg CAT Form Download with Content Caching	The average time required to download a CAT test with a TSM and content caching.
Avg CAT Form Download without Content Caching	The average time required to download a CAT test without content caching.
Avg Wait Time Between CAT Items	The average time required to save a response and load the next question for a CAT test.

■ Capacity Estimator Questions (cont.)

Q3: What information does the site have to supply?

- A: The site needs to supply four numbers:
 - 1. The Internet Service Provider connection speed①
 - 2. The Local Area Network (LAN) connection speed@ (for numbers ①②, see the figure below)

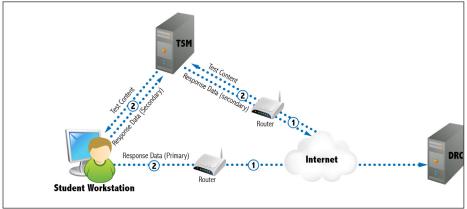


Figure: Testing with a TSM

Note: Test responses are sent directly through the Internet to DRC (unless response caching is configured and the Internet is unavailable).

3. An estimate of the percentage of bandwidth that is currently available for testing

Because testing is probably not the only process running on your LAN and Wide Area Network (WAN), each site must estimate how much capacity these other processes are consuming, subtract that estimate from 100, and enter the result in the Percent of Bandwidth Available for Testing field.

4. An estimate of the number of students who will be testing at the same time

Q4: Are these estimates for each student or for all students testing?

A: The average form download times estimates the time required to download a test that each student will experience if *all* students start testing at the same time. The average wait between item times estimates times for individual students because students finish questions at different times.

Note: The calculations represent conservative estimates. The Capacity Estimator can only provide an estimate; it cannot factor all possible variables, including network and Intranet traffic, that can impact performance.

■ Capacity Estimator Questions (cont.)

Q5: Is it possible to arrive at different estimates for these numbers using other software tools?

A: Yes. Some software tools might connect to servers that are different distances away and use different Internet paths to reach those servers.

Note: The Load Simulation Tool is designed to simulate DRC's testing traffic.

Q6: What does "number of students testing at a time" mean?

A: The number of students testing at a time is the number of students in your school or district network who will download tests at roughly the same time (students who will start testing within a few seconds of each other). All students do not start a test at the same time, so this number is really used to estimate what would happen at maximum load (for more information, see the next question).

Q7: Could you provide examples of how we would use the Capacity Estimator?

- A: Yes. First, assume that 20 students are testing at the same time, with an Internet Service Provider connection speed of 1000 Mbps, a LAN connection speed of 300 Mbps, and 50% of the total bandwidth available. According to the Capacity Estimator, the following are the time estimates:
 - The Avg Time to Download Test Engine (the time the student will wait for INSIGHT to download as he or she logs in for testing) is 1.97 seconds.
 - The Average Form Download time is .54 seconds.
 - The Average Wait Between Writing Items (the time required to save a response and load the next Writing test question) is .17 seconds.
 - The Average Wait Between Non-Writing Items (the time required to save a response and load the next test question for tests other than Writing tests) is .44 seconds.

■ Capacity Estimator Questions (cont.)

Now, assume that the number of students testing at the same time is increased from 20 to 50 (see the note below). According to the Capacity Estimator:

- The Avg Time to Download Test Engine (the time the student will wait for INSIGHT to download as he or she logs in for testing) is 4.85 seconds.
- The Average Form Download time is 1.34 seconds.
- The Average Wait Between Writing Items (the time required to save a response and load the next Writing test question) is .41 seconds.
- The Average Wait Between Non-Writing Items (the time required to save a response and load the next test question for tests other than Writing tests) is .69 seconds.

Note: Although you can increase the number of students testing at the same time to a number greater than 50, for calculation purposes, the Capacity Estimator displays results visually for a maximum of 50 students.

■ Load Simulation Testing Questions

O1: What is the Load Simulation Tool?

- A: It's a software tool that Technology Coordinators can use to perform load simulations that help estimate the amount of time it will take to download tests and upload responses.
 - (!) Important: Enable load simulations only when you are actually conducting a load simulation test using a TSM and a set of student testing devices. Prior to actual student testing (when students are logging in and taking tests), disable load simulations for the TSM (see Working with Locations in Volume III: Configuring Devices for Testing for more information).

Q2: How many testing devices should we use for a simulation? Can we use just one?

- A: DRC recommends that you include all of the schools and all of the computer labs that will perform online testing.
 - **! Important:** For a load simulation test, limit the number of testing devices per TSM to 100. Attempting to perform a load simulation test with more than 100 devices per TSM may cause the TSM to become unresponsive. You may have to uninstall and reinstall the TSM.

Q3: How many times should I run the simulation?

A: DRC recommends that you run the simulation three times during your load simulation testing. Run it twice specifying the TSM as the source for form content and once specifying DRC as the source for form content (see *Load Simulation Testing in Volume II: Testing Site Manager (TSM)*).

Q4: What metrics are reported?

- A: A load simulation test reports the following for each testing device:
 - The source for the content: TSM, DRC, or the client computer (based on configuration)
 - The amount of time it took to load the test to the testing device, on average
 - The time it took to submit the result to DRC
 - The combined time for the load test and to submit the result

For more information and a description of the summary results, see *Load Simulation Testing in Volume II: Testing Site Manager (TSM)*.

■ Load Simulation Testing Questions (cont.)

Q5: What are acceptable results for test load and response times?

A: As a result of the Technology Readiness Assessments that DRC has performed, we suggest that the test load time should be less than 60 seconds. We also suggest that the Avg Submit Test time on the load simulation test should be less than 60 seconds.

These values are timeout limits. They are a combined time that factors in the time required to submit each test response, the wait time between each test question, and the time required for the final test submission.

For a description of all summary results, see *Analyzing Load Simulation Results* in *Volume II: Testing Site Manager (TSM)*.

Districts should analyze their results to determine acceptable response times for their students. If necessary, districts can adjust technical configurations and/or the number of students testing at one time.

■ iPad Questions

Q1: Do I install a TSM on an iPad or Chromebook?

- A: DRC does not support installing a TSM on iPads and Chromebooks (refer to the *Supported System Requirements for ACCESS for ELLs 2.0 and Screener*). You must install the TSM software on a Windows, Mac (OS X and macOS), or Linux computer, and connect to the TSM when you install INSIGHT on the iPad or Chromebook.
- Q2: Can the DRC INSIGHT iPad app be distributed without an MDM as an .ipa file using iTunes or other software/methods?
- A: Yes. Currently, the DRC INSIGHT App for iPads is available from the Apple App Store. You can install the App manually from the Apple App store to an iPad.
- Q3: Does DRC recommend any particular version of Mobile Device Management (MDM) software?
- A: No, there are many versions of MDM software, any of which will distribute INSIGHT. To configure INSIGHT using the MDM software, you must use a version that supports the Managed App Configuration feature (originated in iOS 7).

Q4: Is iOS 10.3 supported?

- A: No—support was discontinued in July of 2018 (refer to the *Supported System Requirements for ACCESS for ELLs 2.0 and Screener*).
- Q5: Is an external keyboard required for testing with iPads?
- A: For WIDA testing, yes.

■ Chromebook Questions

Chromebooks can be a secure platform for administering student assessments. When set up properly, these devices meet K–12 education testing standards. If configured according to Google specifications, Chromebooks can be set to disable students' access to browse the web during an exam in addition to disabling external storage, screenshots, and the ability to print. Google provides three scenarios for setting up Chromebooks for secure assessment, detailed at the link below:

https://support.google.com/chrome/a/answer/3273084?hl=en

If you need help setting up your Google Administrator account or enrolling Chromebooks, please contact Google directly.

Q1: Of the three secure testing scenarios provided by Google, which one did DRC select and why?

A: DRC developed the Chromebook INSIGHT application to meet the specifications of Google's Scenario 1 for delivery of secure assessments. Although each scenario prepares a Chromebook for secure testing, DRC selected Scenario 1 where the student takes an exam on the Chromebook using the DRC INSIGHT App in Single App Kiosk Mode. While the student tests, the INSIGHT App runs in a secure, full-screen mode. After the student exits the test, the Chromebook device can be used for any purpose, secure or otherwise—the Chromebook is only secured during testing with the DRC INSIGHT App.

Scenario 1

DRC specifically selected Scenario 1 because:

- It is the only scenario that allows for fully secure assessment delivery (Single App Kiosk Mode).
- It allows the DRC INSIGHT App to communicate securely with the TSM.
- It does not require locking down the device and dedicating it for assessment purposes. Students can use the Chromebook for other purposes when the INSIGHT App is not being used for testing.
- It provides students a full-screen environment (the only scenario that does).

■ Chromebook Questions (cont.)

Scenario 2

In contrast, Google's Scenario 2 includes a restricted sign-in feature for secure assessment delivery, which assumes that the Chromebook will be used solely for testing purposes. When this feature is enabled, non-assessment sign on is not allowed. When this feature is not enabled, test administrators must maintain separate student profiles—assessment and non-assessment—to allow for additional restrictions needed during assessment sessions.

Scenario 2 requires a higher level of administration oversight (for example, creating accounts twice). And, it requires manual management of security permissions making it prone to user error that is difficult to detect. It also requires taking the test in the Chrome browser, or manually launching a non-kiosk application (essentially launching the user into a desktop session where they have access to one URL). Finally, the Chromebook device must be cleared of data (wiped) upon exiting the test.

Scenario 3

In Scenario 3, Google's Public Session Kiosk Mode is used to limit user access to non-assessment-related features of the Chrome OS operating system. Using Scenario 3 negates the possibility of TSM integration and secure content delivery due to known conflicts with Chrome packaged Apps. In addition, there are other considerations with Scenario 3:

- The URL and taskbar at the bottom of screen are visible. This consumes screen space and means the test engine must scale down the test content.
- Students can open additional Chrome windows.
- Students can use a command line shell that allows access to another machine.
- Students can close the Chrome window while the test engine is running, instead of using **Pause–Exit** or **Review–End Test-Exit**. This could mean lost test responses.

Chromebook Questions (cont.)

Q2: Does DRC require users to log in to each Chromebook and write down the Device ID?

A: No. For unregistered Chromebooks, use the Central Office Services - Device Toolkit to create DRC ORG Units, download the configuration file (.zip) using Chrome device management, and upload the chromeos.json file from the configuration file using Chrome device management. When the user starts the DRC INSIGHT App on the Chromebook, the Chromebook will be registered.

For Chromebooks that are already registered with the Central Office Services - Device Toolkit, if the Central Office Services - Device Toolkit configurations and Device IDs are still applicable, when INSIGHT is launched it will locate the Device ID from the Central Office Services - Device Toolkit and use the associated configuration.

Note: The System Readiness Check (available through a link on the DRC INSIGHT App main testing page) displays the Device ID on the System Information page.

Q3: Why does DRC require Google Apps for Education and the Google Administrator accounts?

A: The DRC INSIGHT Chrome App requires Single App Kiosk mode to launch and ensure a secure testing environment on Chrome devices. Google Apps for Education and Chrome device management allow Chrome administrators to manage kiosk apps for multiple Chrome devices from a central console. This is the best approach to managing these devices in terms of efficiency and security.

DRC assumes that users have registered their Chromebooks as part of the initial implementation. Google specifies two additional requirements for secure testing using any of the three scenarios described in Q1:

- Google administrators must use Chrome device management to manage their Chrome devices from a single location.
- Google administrators must enroll each device in the school's domain.

■ Chromebook Questions (cont.)

Q4: How is installing DRC INSIGHT different than installing other testing applications that districts may be using?

A: The DRC INSIGHT Chromebook App is configured to be secure and deployed using Chrome device management and configured to work with the TSM using the Central Office Services - Device Toolkit. For a different application, the process would not necessarily use a secure App or a TSM. These processes rely on Chromebook user account or other settings to restrict access. Since there is no secure testing App for the Chromebook, these processes require a workaround to secure the testing sessions.

Q5: Does the deployment or installation of DRC INSIGHT require the Chromebooks to be dedicated to testing for the duration of the assessment window?

A: No, the Chromebook device is not dedicated to testing, but the secure DRC INSIGHT App is. The DRC INSIGHT App is the secure testing environment that the student accesses using a unique test ticket. After a student has finished a test and exits the DRC INSIGHT App, the student can execute other applications and use the Chromebook for other purposes. Test Administrators are responsible for monitoring testing and ensuring students are properly ending and submitting their tests.

Q6: Does Google provide a method to mass deploy secure testing configurations to Chromebooks?

A: Yes, Google has a feature that allows users to "push" a secure testing configuration using Chrome device management.

Q7: How do I configure Chromebooks to work with DRC INSIGHT?

A: DRC provides the Central Office Services - Device Toolkit that you can use to configure and manage your Chromebooks after you have registered them in your Chrome domain.

Q8: Can I use DRC INSIGHT on a touch-enabled Chromebook?

A: Yes, DRC supports certain touch-enabled devices (see the *Supported System Requirements for ACCESS for ELLs 2.0 and Screener*).

Hints and Tips

General Hints and Tips

The following are hints and tips for testing with iPad and Chromebook devices.

- Be sure to have a strong network connection, either Wi–Fi or direct Internet connectivity.
- Make sure the device's keyboard is set to US English.
- Make sure the devices are either fully charged or plugged in.
- Note that an optical drive is not required.
- Note that while you are running the DRC INSIGHT application, the system operates in Single App Kiosk Mode.
- Remember that DRC INSIGHT displays in landscape mode only.

■ iPad Hints and Tips

- Use the following finger tap/press to navigate DRC INSIGHT—**Show Version** = two fingers plus three taps.
- For calculators, click the **OK** button versus the Return key. Using the Return key on your keyboard will not work as an 'Enter' function.
- All iPad devices have a Sleep Mode setting. In Sleep Mode the screen goes black and users can touch any key to re-activate it, or press their home key and type in the device passcode (if applicable). The DRC INSIGHT timeout warning is not visible when an iPad is in Sleep Mode. To disable Sleep Mode, select Settings-General-Auto-Lock and select Never.

Note: School iPad profiles may not permit you to set this to Never.

- Smaller graphing and dragging elements may be difficult to track because the user's finger covers the item.
- The pinch-to-zoom in/out iOS gesture is supported; the swipe iOS gesture is not supported.
- External keyboards are required for all WIDA tests.
- The Audio starting point does not turn red when your finger gets close to touching it.

■ Chromebook Hints and Tips

 You must enroll a Chromebook in your Google domain account before using it with INSIGHT. As part of the enrollment process, Google uses the concept of ORG Units. These are not the same ORG Units that DRC uses in the Central Office Services - Device Toolkit.

To prepare for the Chromebook administration, please ensure that you have enrolled all of your Chromebooks in the Google Device Manager software. This software helps you manage your device configurations.

For more information about managing Chromebooks and setting up your basic Chromebook environment, see the topic https://support.google.com/chrome/a/answer/1289314?hl=en&ref topic=2935995.

If you need help setting up your Google Administrator account or enrolling Chromebooks, please contact Google directly.

- The Central Office Services Device Toolkit manages the INSIGHT portion of the Chromebook device configuration process.
- When you use the Central Office Services Device Toolkit to create DRC ORG Units and group Chromebooks, DRC assigns each Chromebook a Device ID. This Device ID is different than the serial number of the Chromebook.
 - Google uses the Chromebook's serial number to enroll the Chromebook in the Google domain.
 - DRC uses the Chromebook's Device ID to register the Chromebook in a DRC ORG Unit.

To help manage and organize your Chromebooks, keep track of the current Device ID.

On your Chromebook, do not log in to your Google account if you
want to access DRC INSIGHT. Because INSIGHT runs in Single
App Kiosk Mode, you cannot access it after you have logged in to a
Google account. If you attempt to start the INSIGHT App, an error
message displays indicating that you are not in Single App Kiosk
Mode. To access INSIGHT, log out of your Google account and start
the INSIGHT App.

Google/ Chromebook Plug-In Error

When students test using Chromebooks, the process generates communications to both Google Chrome and to DRC. When a student launches the INSIGHT App on the day of testing, INSIGHT attempts to reach Google Chrome to generate a new instance of INSIGHT on the Chromebook. If the communication to Google times out before this happens, a plug-in error occurs.

Districts with complex content filters, peer-to-peer networking, or deep packet inspection of Internet traffic in their network may have extra filtering, which can delay the communication to Google on the initial launch of INSIGHT and cause a plug-in error.

If your site experiences a Goggle plug-in error while testing with Chromebooks, you can use the steps/questions listed below to troubleshoot the process.

Basic Steps

- **B1.**Reboot the device
- **B2.** Wait for/confirm that you have a solid Internet connection
- **B3.** Wait 30 seconds and reopen INSIGHT

Intermediate Steps

- **I1.** Check the speedtest at betaspeedtest.net
- **I2.** Check your whitelisting
- **I3.** Check your access point-to-student ratio
- **I4.** Verify how the school's WiFi policy handles "guest" (kiosk mode) Chromebook traffic
- **I5.** Check the connection type in Google Admin for "Direct Connection"

Advanced Steps

- **A1.** Check the content filter settings:
- SonicWall and SmoothWall: Disable Deep Packet Inspection through SSL
- LiteSpeed: Disable Decrypt SSL
- iBOSS: Add Chromebook kiosk user exceptions. Can iBOSS whitelist URLs? If not, can iBOSS be disabled?
- **A2.** Check the access point brand. If Cisco Meraki, disable layer 7 p2p filtering.

Error Messages

Error Messages

■ What's Covered in This Section

This section describes the more common error messages you may encounter while installing, configuring, and using DRC INSIGHT, the Testing Site Manager (TSM), and the Central Office Services - Device Toolkit. It also provides recommendations to resolve them.

For some messages, there are references to a more detailed description of how to resolve the error.

Message: A Communication System Error has Occurred

Please raise your hand and wait for help.

A system error has occurred. Please contact DRC Customer Support for assistance. Customer Support will request the information that is displayed when you click Details. You can copy this information and send it to DRC.

When you are ready, click OK to close this message.

Description: A system communication error occurred while a student was testing in INSIGHT.

What Should I Do? Contact DRC Customer Support. If requested, click **Details** to display the troubleshooting details about this message. DRC Customer Support may request that you send this information to DRC.

Message: Chromium OS version xxxx.xx.x is not supported by DRC INSIGHT

The version of the operating system on this testing device is not supported by the DRC INSIGHT team.

Description: DRC INSIGHT cannot use the version of Chrome OS.

What Should I Do? Update the Chrome OS browser to version 66 or higher.

Message: Configuration Error

Contact your technical resource and provide them with the following information: DRC INSIGHT cannot retrieve the configuration profile associated with this device because a device can only be actively assigned to one Device Toolkit ORG Unit for a testing program.

Description: The Central Office Services - Device Toolkit is unable to uniquely identify the device because more than one ORG Unit ID exists for the device within the same testing program.

What Should I Do? Verify that the device has been assigned to only one configuration per testing program on the device (see *Volume III: Configuring Devices for Testing*).

Error Messages

Message: Configuration Not Found

Contact your technical resource and provide them with the following information: DRC INSIGHT cannot retrieve the configuration profile associated with this device because it cannot find the Device Toolkit ORG Unit ID which was entered incorrectly, was deleted, or was not assigned to the device.

Description: One of the following situations has occurred:

- The Central Office Services Device Toolkit ORG Unit was deleted after the device was assigned to it.
- The Central Office Services Device Toolkit ORG Unit ID was not uploaded.
- The Central Office Services Device Toolkit ORG Unit ID was entered incorrectly.
- The Central Office Services Device Toolkit ORG Unit ID was not set up in Chrome Management (or in an MDM).

What Should I Do? Verify that the device has been assigned to an ORG Unit in the Central Office Services - Device Toolkit and that the ORG Unit ID has been uploaded to this device. After you have the correct Central Office Services - Device Toolkit ORG Unit information, click **Assign Device to ORG Unit** and enter the correct ORG Unit ID (see *Volume III: Configuring Devices for Testing*).

Message: Connection Error Retrieving Content

Please contact your local IT staff to verify network connection is working. They can contact DRC Customer Support if they need additional help to resolve the matter.

Description: The testing client is not able to connect and download the test form from DRC. This connection error occurred while the client was trying to download the form.

What Should I Do? If the issue persists check your whitelisting on your network devices and prioritize testing traffic. If possible allow testing traffic to bypass as many network devices as possible. Ensure that bandwidth is not being completely consumed. If you are using a TSM, verify the whitelisting and firewalls to and on the TSM (see *Volume I: Introduction to Online Testing*). Perform a content recheck within the TSM to verify that all content downloaded.

Message: Could Not Retrieve Testing Information

Possible connection error while attempting to retrieve device configuration.

Description: INSIGHT is unable to determine the identity of the device.

What Should I Do? Check your network connection and retry. Verify that the device is registered in the DRC INSIGHT Central Office Services - Device Toolkit (see DRC INSIGHT Central Office Services - Device Toolkit in Volume III: Configuring Devices for Testing).

Message: Device Registration

A device cannot be actively registered to more than one Central Office Services - Device Toolkit ORG Unit for the same testing program.

Description: The Central Office Services - Device Toolkit is unable to uniquely identify the device because more than one

ORG Unit ID exists for the device within the same testing program.

What Should I Do? Verify that the device has been assigned to only one configuration per testing program in the Central Office Services - Device Toolkit and that one ORG Unit ID has been uploaded to this device. After you have the correct Central Office Services - Device Toolkit ORG Unit information, click Assign Device to ORG Unit and enter the correct ORG Unit ID (see *Volume III: Configuring Devices for Testing*).

Message: Download of Upgrade Failed

Your upgrade failed because the download was unsuccessful.

Description: The testing client tried to upgrade but was unable to download the update.

What Should I Do? Try one or more of the following actions:

- Retry the update.
- Verify your whitelisting settings.
- Manually update the testing client.

Message: Failed to Load Device Information

A communication error occurred. Click Reload to try again or Cancel to cancel the process.

Description: Because of a network communication error, the device information was not loaded from the Central Office Services - Device Toolkit.

What Should I Do? Wait a few seconds and click **Reload** to retry the process. If the network problems persist, click **Cancel** and contact your network administrator (or try again later).

Error Messages

Message: Guided Access is Not Enabled

Please raise your hand and wait for help.

Description: Guided Access must be started on the iPad device before students log in and begin testing.

What Should I Do? Start Guided Access on the iPad device (see *Working with Guided Access* in *Volume IV: DRC INSIGHT*).

Message: Internet Connection Error

There has been an interruption in Internet connection. The student may be moved to another computer to continue testing. If this error persists, contact your local IT staff to verify network and Internet connections are working. They can contact DRC Customer Support if they need additional help to resolve the matter.

Description: There was an interruption in the Internet connection and the testing client was unable to reach DRC or the TSM.

What Should I Do? If the issue persists, check whitelisting on your network devices and prioritize testing traffic. Allow testing traffic to bypass as many network devices as possible. Verify that all bandwidth is not being completely consumed.

Message: No TSM Configured

A TSM must be configured when using audio. Please contact an administrator.

Description: The testing client is trying to log in to an audio test that requires a TSM, but no TSM is configured. A TSM must be configured for WIDA testing.

What Should I Do? Connect the testing client to a TSM for content caching (see *DRC INSIGHT Central Office Services - Device Toolkit* in *Volume III: Configuring Devices for Testing*).

Message: Operating System version is not supported by DRC INSIGHT

Please raise your hand and wait for help.

This version of the operating system on this testing device is not supported by the DRC INSIGHT team. Please contact DRC Support if you have questions.

Select Exit to return to the Test Sign In page.

Description: DRC INSIGHT will not work with the version of the operating system that is currently installed on the testing device.

What Should I Do? Install a supported version of the operating system or select a different testing device on which to test.

Message: Registration Failed

The registration was unsuccessful

The registration failed because the Device Toolkit ORG Unit ID does not exist. Click Back to re-enter the ORG Unit ID.

Description: DRC INSIGHT was unable to register the device because it could not find the device's Central Office Services - Device Toolkit ORG Unit ID.

What Should I Do? Verify that you have the correct ORG Unit ID for the device, click Back, and re-enter the ORG Unit ID.

Message: Session Ended

Another session has been activated with this student's login. Please confirm the student is using their assigned login. If the student is actively testing on another computer, click OK. Please contact DRC Customer Support if you need additional help to resolve this matter.

Description: Someone else has logged in with the same credentials on another computer.

What Should I Do? Verify that the student is using the correct testing credentials and that another student is not using them and have the student log in again.

Message: Session Inactive. Please raise your hand and wait for help.

Your session has been ended due to inactivity. Any test responses you submitted will be stored. Click OK to return to the log-in page.

Description: The student's test session ended due to inactivity.

What Should I Do? If the student needs to continue testing, have them click **OK** to return to the log-in page and log in again using his or her log-in credentials.

Message: Session Status Outside Window

Testing is currently unavailable. Please contact an administrator.

Description: The test ticket that is being used to log in to the test is in a test session for which the window is not active.

What Should I Do? Move the student to a test session in an appropriate testing window.

Error Messages

Message: Test Exit! Response Stored on TSM

All of the student's responses have been saved to the Testing Site Manager (TSM). The student should return to the same testing lab to complete the test.

Please contact your local IT staff to confirm that the TSM is cleared by the end of the day. They can contact DRC Customer Support if they need additional help to resolve this matter.

Description: The student has exited the test and the test responses are stored on the TSM.

What Should I Do? Verify that all of the test responses are clear from the TSM by the end of the testing day.

Message: Test Version Error

The form the student is trying to access is not available. The form must be downloaded prior to students testing. Please contact your local IT staff to update the Testing Site Manager (TSM). If further support is required, contact DRC Customer Support.

Description: The form the testing client is trying to download from the TSM is not available.

What Should I Do? Download the form onto the TSM (see "Question: How do I update test forms in a TSM?" on page 258).

Message: Test Version Error

The test the student is trying to access is not the most up-to-date version. The latest version must be downloaded prior to students testing. Please contact your local IT staff to update the Testing Site Manager (TSM). If further support is required, contact DRC Customer Support.

Description: The form on the TSM is not up to date.

What Should I Do? Update the form on the TSM (see "Question: How do I update test forms in a TSM?" on page 258).

Message: The device's operating system has been updated and is in the process of being certified by DRC.

The DRC INSIGHT application should perform as intended, but if you have questions, please contact your Technology Coordinator.

This device is using OS version xxxxx

Description: The operating system on the testing device is valid, but the version or level of the operating system has not been fully tested by DRC.

What Should I Do? You are allowed to test with this version, but DRC recommends that you use a fully tested and supported level of the operating system.

Message: TSM Connection Error -- Could Not Register TSM

This computer cannot connect to the Testing Site Manager (TSM). The problem must be corrected before the student can continue testing. Try logging in again or restarting INSIGHT. Otherwise, contact your local IT staff to verify network and TSM connections are working. They can contact DRC Customer Support if they need additional help to resolve the matter.

Description: The connection to the TSM was lost. All responses should be stored either at DRC or on the TSM.

What Should I Do? Confirm that the testing client can reach the TSM. Also confirm that the testing client's TSM URL is correct.

Message: TSM Connection Error During Login

This computer cannot connect to the Testing Site Manager (TSM). The connection or the content must be restored before the student can continue testing. Please contact your local IT staff to verify network and TSM connections are working. They can contact DRC Customer Support if they need additional help to resolve the matter.

Description: The testing client is not able to connect to the TSM. This connection error occurred while trying to login.

What Should I Do? Verify that you can reach the TSM. If the issue persists check your TSM computer's firewall and check your whitelisting on your firewall, content filter, proxies and other network devices.

Message: TSM Connection Error -- Responses May Be Stored

Please raise your hand and wait for help.

Failed to load at: variable system address

This computer can no longer connect to the Testing Site Manager (TSM). The connection must be restored before the student can continue testing. Please contact your local IT staff to verify network and TSM connections are working. They can contact DRC Customer Support if they need additional help to resolve the matter.

Description: The testing client can no longer connect to the TSM. The connection must be correct to resume testing.

What Should I Do? Contact your local IT staff and verify that you can reach the TSM. If the issue persists check your TSM computer's firewall and check your whitelisting on your firewall, content filter, proxies and other network devices.

Error Messages

Message: TSM Connection Error Retrieving Content

This computer cannot connect to the Testing Site Manager (TSM) to retrieve content. The connection or the content must be restored before the student can continue testing. Please contact your local IT staff to verify network and TSM connections are working. They can contact DRC Customer Support if they need additional help to resolve the matter.

Description: The testing client is not able to connect and download the test form from the TSM. This connection error occurred while trying to download the form.

What Should I Do? Verify that all the forms are up to date and that the testing client can reach the TSM. Click the **Recheck Content** button on the TSM to verify that the files are not corrupt.

Message: TSM Content Caching Configuration Error

The Testing Site Manager (TSM) is not configured to deliver testing content. Enter a different TSM for Content Caching. Please contact DRC Customer Support if you need additional help to resolve this matter.

Description: The testing client is configured to download testing content from the TSM, but the TSM is not configured to deliver content.

What Should I Do? Either the client must be set to not download content from the TSM, or the TSM must be configured to provide content. This is a configuration issue and something needs to be corrected in the setup. For example, a URL must be updated.

Message: TSM Content Caching Error

The Testing Site Manager (TSM) is not configured to deliver testing content. Testing Content will not be downloaded from the TSM. Please contact your local IT staff to update your content source configuration. They can contact DRC Customer Support if they need additional help to resolve this matter.

Description: The testing client is configured to download testing content from the TSM, but the TSM is not configured to deliver content.

What Should I Do? Either the client must be set to not download content from the TSM, or the TSM must be configured to provide content. There is an issue with content caching that cannot be updated by making a change to the configuration.

Message: TSM Version Error

The TSM is out of date. Please contact an administrator.

Description: The TSM is out of date.

What Should I Do? Update the TSM. If you did not specify automatic updates of your TSM software when you installed it, you must uninstall the current version of the TSM and reinstall the new version.

Message: Your Client Attempted To Access An Invalid URL

Your session has been ended because your client tried to access an unsupported address.

Please click the OK button to proceed.

Description: The client is pointed to the wrong URL. The correct URLs are as follows:

BaseURL: https://wbte.drcedirect.com/WIDA/

StartupURL: https://wbte.drcedirect.com/WIDA/portals/wida/

UpdateURL: https://wida-insight-client.drcedirect.com/Download/SecureBrowser/VERSIONS.txt

What Should I Do? Verify that the URLs are correct. Be aware that this issue is often caused by incorrect forwarding by either the router DNS or the ISP.

Message: Your Client Failed The Readiness Check

Your session has been ended because your client is not supported. Please click the OK button to proceed. It is possible that the browser that you are using is unsupported. Please download the latest version of Chrome.

Description: The testing client has failed a System Readiness Check test.

What Should I Do? Use the System Readiness Check to see which test failed and fix the issue. This error can be caused by issues such as an invalid operating system or incorrect screen resolution. If you need additional help, please contact DRC Customer Support for assistance.

Error Messages

Message: Your Client Is Out of Date

Your session has been ended because your client is out of date. We will now attempt an upgrade.

Description: The testing client is out of date. If Auto Update is enabled, it will now run.

What Should I Do? If you enabled Auto Update, it will run now. Otherwise, enable and run Auto Update, or install the update manually.

Message: Your Client Is Out Of Date

Your session has ended because your client is out of date. The latest version must be downloaded prior to students testing.

Description: The testing client is out of date. Auto Update is not enabled, so you must update the testing client manually.

What Should I Do? You did not enable Automatic Updates. Enable and run Automatic Updates or install the update (upgrade) manually.

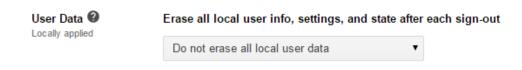
Note: You cannot use Automatic Updates to move from version 5.x of INSIGHT to version 6.x. You must manually uninstall INSIGHT 5.x and manually install INSIGHT 6.x.

Message: Your Device Has Not Been Registered

The Chromebook device was already registered in the DRC INSIGHT Device Toolkit.

Description: Because the Google Admin Console setting for Erase all local user info, settings, and state after sign-out was accidentally set to Erase all local user data after each sign-out, the Chromebook was registered successfully, but the registration was lost/deleted when the Chromebook was restarted.

What Should I Do? Verify that the setting for Erase all local user info, settings, and state after sign-out in the Google Admin Console is set to Do not erase all local user data (see below).



Notes

Data Recognition Corporation (DRC) 13490 Bass Lake Road Maple Grove, MN 55311

Direct: 1-855-787-9615

Website: https://www.wida-ams.us Email: WIDA@datarecognitioncorp.com

Revision Date: September 6, 2018