

# *INSIGHT*

## *Frequently Asked Questions (FAQs)*



## **ACCESS for ELLs 2.0 Field Test**



## **What's Covered in the FAQs**

This document contains a list of frequently asked questions and answers about configuring, installing, and using DRC INSIGHT and the Testing Site Manager (TSM) software. The questions and answers cover the Windows and Macintosh (OS X) environments.

All of the questions are technical in nature and they are divided into categories, including General Questions and Common Technical Questions and Answers. The Common Technical Questions and Answers cover the common technical support issues you may encounter, and provide tips, techniques, and workarounds to resolve them.

## General Questions

**Q: 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.

**Q: 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.

**Q: 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: There is nothing built into the software.

**Q: 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) version uses a .dmg file for the TSM and a .pkg file for INSIGHT.

**Q: I tried removing the TSM and reinstalling it, but now I can’t seem to use it?**

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. After you remove the TSM, if this folder still exists, delete it before you reinstall the TSM.

**Q: 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.

## General Questions

### **Do we need to go to each student's computer to enable automatic updates?**

A: No. Just remember to enable automatic updates when you install the INSIGHT software. After installation, INSIGHT automatically checks for software updates and installs them whenever it is launched.

### **Q: How are test responses received?**

A: It depends on whether a TSM is installed and how it is configured.

### **If a TSM is installed and configured for content caching**

The students log in first. INSIGHT always contacts DRC to log in. After students log in, they download the test from the TSM and send test responses directly to DRC.

### **If a TSM is installed and configured for response caching**

If there is an interruption in internet connectivity, a student's testing computer starts sending the test responses to the TSM. The TSM tries to submit them to DRC every fifteen minutes. The student continues sending responses to the TSM until the student completes the test, pauses, or exits and logs back in.

**Note:** Students cannot log back in while their responses are still on the TSM.

### **If there is no TSM installed**

The student logs in by connecting with DRC. Tests are sent directly from DRC and responses are sent directly to DRC. If there is an Internet connectivity problem, the student is unable to continue testing.

### **Q: How do I test that a TSM is working?**

A: Start the System Readiness Check on a testing computer.

This software is in the installation directory of the testing client. For example, on a Windows 7 machine (64-bit), a shortcut to the software is located at C:\Program Files (x86)\WD Online Assessment System\ Readiness.

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.

**3a.** If you have content caching configured, check the results for Content Caching TSM Connection, Content Caching TSM Status, and Content Caching TSM Version.

## General Questions

**3b.** If you have response caching configured, check the results for Response Caching TSM Connection, Response Caching TSM Status, and Response 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 **ACCESS for ELLs 2.0 FT Online Assessments**, select **Student Directions and Practice Items**, sign in, and take a training test to verify that you can connect to the TSM.

**Q: 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.

## Capacity Estimator Questions

### **Q: What is the Capacity Estimator?**

A: The Capacity Estimator is an Excel spreadsheet file designed to help schools and school districts estimate the time it will take their students to download tests initially and move to the next question after they finish a question. The time estimates the tool creates 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

This tool was created to help sites plan their testing more effectively based on a number of factors, including the current network traffic and the number of students testing.

### **Q: What does the Capacity Estimator estimate?**

A: The Capacity Estimator estimates four different time values:

- The Average Time to Download Test Engine—the time (in seconds) the student will wait for INSIGHT to download as they login for testing.
- The Average Test Download Time without Content Caching—the average time (in seconds) it takes to download a test without content caching.
- The Average Test Download Time with Content Caching—the average time (in seconds) it takes to download a test with a TSM and content caching.
- The Average Wait Time Between Items—the average time (in seconds) required to save a response and load the next test question.

### **Q: Are these estimates for each student, or for all students testing?**

A. The two Average Test Download Times estimate the time each student will experience to download a test if *all* of the students start testing at the same time. The Average Wait Time Between Items estimates the time for an individual student, since 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

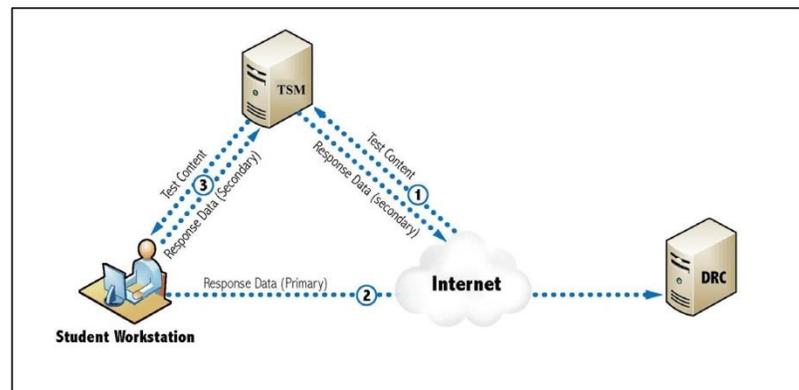
### Q: What information does the site have to supply?

A. The site needs to supply five numbers (for the numbers ①②③, refer to the figures below):

- The Internet download speed ①
- The Internet upload speed ②
- The Local Area Network (LAN) speed ③
- An estimate of the percentage of bandwidth that is currently available.

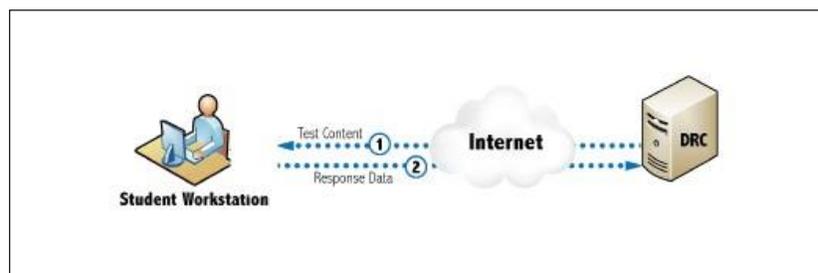
Because testing is probably not the only process running on your LAN and Wide Area Network (WAN), each site must estimate how much capacity these other processes are consuming, subtract that estimate from 100, and enter the result in the Percent of Bandwidth Available for Testing field.

- The number of students testing at a given time.



*Testing With a TSM*

**Note:** The primary path is the data path used when test responses are being sent directly through the Internet and stored on the TSM; the secondary path is the data path used when responses are also being sent from the TSM (the Internet connection was interrupted).



*Testing Without a TSM*

## Capacity Estimator Questions

**Q: Is it possible to arrive at different estimates for these numbers using other software tools?**

A. Yes. For example, we recommend using Speedtest.net to determine your download and upload speeds back to Minnesota. Other 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.

**Q: What does "number of students testing" mean?**

A: The number of students testing is the number of students on 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).

**Q: Could you provide an example of how we would use the Capacity Estimator?**

A. Yes, see below.

Assume that 10 students are testing at the same time in a computer lab, with a typical download speed of 25 Mbps, an upload speed of 5 Mbps, a LAN speed of 100 Mbps, and 80% of the total bandwidth available. According to the Capacity Estimator:

- The Average Time to Download Test Engine (the time the student will wait for INSIGHT to download as they login for testing) is 8.67 seconds.
- The Average Test Download Time without Content Caching (the time required to download the test) is 8.29 seconds.
- The Average Test Download Time with Content Caching is 2.15 seconds.
- The Average Wait Time Between Items (the time required to save a response and load the next test question) is .53 seconds.

## Load Simulation Testing Questions

### **Q: What is the Load Simulation Tool?**

A: It's a software tool that Technology Coordinators (TCs) can use to perform load simulations that help estimate the amount of time it will take to download tests and upload responses.

### **Q: How many testing computers 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. At each school, each simulation should include as many testing computers as possible to help you assess the school's readiness.

### **Q: How many times should I run the simulation?**

A: DRC recommends that you run the simulation three times during the timeframe you have established for load simulation testing. Run it twice specifying the TSM as the source for form content, and run it once specifying DRC as the source for form content.

### **Q: What metrics are reported?**

A: A load simulation test reports the following results for the individual testing computers:

- 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 computer, on average.
- The time it took to submit the result to DRC.
- The combined time for the load test and submit result.

### **Q: What are acceptable results for test load times and test response times?**

A: As a result of Technology Readiness Assessments that DRC has performed, we suggest that the test load time should be less than 60 seconds. Ideally, individual test response times should be less than one second, but a district may determine that up to two seconds is acceptable.

Districts should analyze their results and set what they feel are acceptable response times for their students. If necessary, they can make adjustments to their technical configurations and/or the number of students testing at one time.

## Common Technical Questions and Answers

This topic describes detailed resolutions to common technical support issues you may encounter, as well as tips, techniques, and workarounds to resolve them.

### Question 1: I Don't Know What to Whitelist, Allow, or Unblock?

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The following is a list of the items to include.

- Allow or enable http/https protocols on ports 80/443.
  - ❗ **Important:** To avoid potential conflicts, verify that no other device is using either port. For Windows 7, you can enter the command **netstat -a** from a command prompt to display the list of ports currently being used.
- Allow connectivity on ports 80 and 443.
- Whitelist the following file types, both internally and externally:  
**enc exe** (for updates) **gif html jar jpeg json xml**
- Prioritize and whitelist INSIGHT traffic on:
  - Firewalls      Internet packet shaper      routers      switches      proxies
  - Other network devices you use
- Allow whitelist access for content. Try these links in a browser window to see if you have access:

Link	Displays a blank page with a label similar to...
<a href="http://wida-insight-client.drccedirect.com/">http://wida-insight-client.drccedirect.com/</a>	insightwebdl01
<a href="https://wida-insight.drccedirect.com/ping.html">https://wida-insight.drccedirect.com/ping.html</a>	54 systemonline
<a href="https://wbte.drccedirect.com">https://wbte.drccedirect.com</a>	no label

#### Notes:

- When whitelisting, you may need to use \*.drccedirect.com instead of wida-insight.drccedirect.com.
- 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.
- Each state uses its own URLs and IP addresses to communicate from the INSIGHT client (workstation) software to DRC servers, or from the TSM server to DRC servers.

State	URL	IP Address	Port/Protocol
WIDA	<a href="http://wida-insight-client.drccedirect.com">http://wida-insight-client.drccedirect.com</a>	50.58.190.73	80/http; 443/https
	<a href="https://wida-insight.drccedirect.com">https://wida-insight.drccedirect.com</a>	50.58.190.72	80/http; 443/https
	<a href="https://wbte.drccedirect.com">https://wbte.drccedirect.com</a>	50.58.190.53	80/http; 443/https

## Common Technical Questions and Answers

### *Question 2: How Do I Update Test Forms in a TSM?*

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To update your test forms, do the following:

1. Open the TSM by pasting the following URL in a browser:

**http://localhost:8080/**

**Note:** The string **localhost** only works in this URL if you are using a browser on the computer where the TSM is installed.

2. Change **localhost** to the IP address or server name of the computer where the TSM is installed.
3. Select any optional media files (HVA, TTS, VSL) that need to be updated (if applicable).
4. If the status of any content changes to Out of Date, click the **Update** button.

**Note:** It takes a while for the TSM to update. Wait for the screen to refresh and all of the content to display the status **Up to Date**.

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## Common Technical Questions and Answers

### ***Question 3: Can We Mass Deploy the Test Software to All of the Student Computers?***

Yes, but the details vary depending on which technology you use for deployment and the operating system to which you deploy. Basically, you can configure the installer using arguments when you deploy it in a non-interactive or silent mode. For technical details, see *Modifying the Setup File*.

#### **Modifying the Setup File**

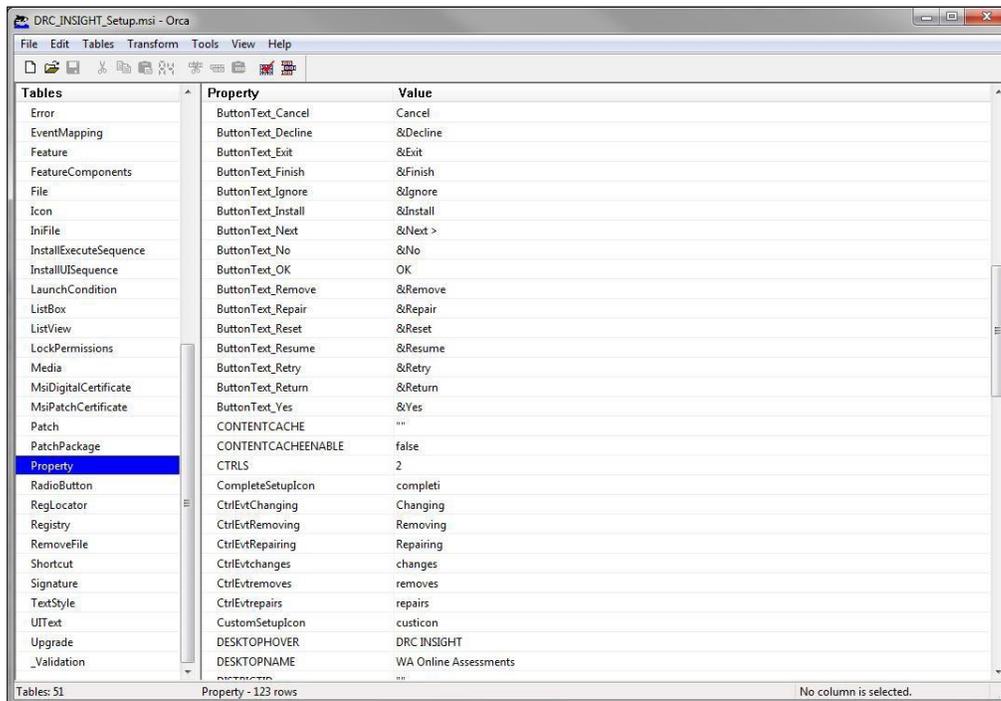
You can modify the DRC\_INSIGHT\_Setup.msi installation file to install your software on many machines using different installation settings. To modify the file, you need the ORCA installer package from the Windows SDK for Windows Installer Developers. This package is available at the following location:

**<http://www.microsoft.com/download/en/details.aspx?displaylang=en&id=3138>**

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.



The screenshot shows the Orca installer tool window titled "DRC\_INSIGHT\_Setup.msi - Orca". The "Property" table is selected in the left-hand pane. The main area displays a table with three columns: "Property", "Value", and "Value". The "Property" column lists various installation properties, and the "Value" column shows their corresponding values. The "Property" table is highlighted in blue.

Property	Value
ButtonText_Cancel	Cancel
ButtonText_Decline	&Decline
ButtonText_Exit	&Exit
ButtonText_Finish	&Finish
ButtonText_Ignore	&Ignore
ButtonText_Install	&Install
ButtonText_Next	&Next >
ButtonText_No	&No
ButtonText_OK	OK
ButtonText_Remove	&Remove
ButtonText_Repair	&Repair
ButtonText_Reset	&Reset
ButtonText_Resume	&Resume
ButtonText_Retry	&Retry
ButtonText_Return	&Return
ButtonText_Yes	&Yes
CONTENTCACHE	""
CONTENTCACHEENABLE	false
CTRLS	2
CompleteSetupIcon	completi
CtrlEvtChanging	Changing
CtrlEvtRemoving	Removing
CtrlEvtRepairing	Repairing
CtrlEvtchanges	changes
CtrlEvtremoves	removes
CtrlEvtrepairs	repairs
CustomSetupIcon	custicon
DESKTOPHOVER	DRC INSIGHT
DESKTOPNAME	WA Online Assessments
	""

*Figure: Property Table*

## Common Technical Questions and Answers

- The following are the different properties you may want to change. To make a change, double-click on the value of the property, enter your value, and click **Enter**.

### **Important:**

- Make sure that there are no spaces before your input—do not put spaces in front of any attribute that you modify.
- For ADMINNAME, ADMINID, DISTRICT\_NAME, DISTRICTID, SCHOOL\_NAME, and SCHOOLID, use the name and/or numeric code from the locations file located at **<https://wd-insight.drccdirect.com/InsightClientRESTServices/ClientRESTService.svc/locations>**.

### **AUTOUPDATEFLAG**

Turns automatic updates on or off. True enables automatic updates.

### **ENABLELCS**

Enables a TSM for response caching. If true, use LCSURL to specify the TSM server that will perform response caching.

### **LCSURL**

The name or IP address of the TSM response caching server. The default value is `https://localhost:8443/`. Replace localhost with the name or IP address of the TSM response caching server.

### **LOADSIMULATIONENABLE**

Specifies that load simulation testing is enabled for the testing computer. If true, include CONTENTCACHEENABLE set to true and CONTENTCACHE to specify the TSM server that will perform load simulation tests. You also must specify ADMINNAME, ADMINID, DISTRICT\_NAME, DISTRICTID, SCHOOL\_NAME, and SCHOOLID.

### **ADMINNAME**

The state name for load simulation testing.

### **ADMINID**

The state ID for load simulation testing

### **DISTRICT\_NAME**

The district name for load simulation testing.

### **DISTRICTID**

The district ID for load simulation testing.

### **SCHOOL\_NAME**

The school name for load simulation testing.

### **SCHOOLID**

The school ID for load simulation testing.

## Common Technical Questions and Answers

### **CONTENTCACHEENABLE**

Enables a TSM for content caching. If true, use CONTENTCACHE to specify the TSM server that will perform content caching.

### **CONTENTCACHE**

The URL and secure port of the TSM server that caches test content and performs load simulation tests. The default value is https://localhost:8443/. Replace localhost with the name or IP address of the TSM content caching server.

### **HTTPSPROXY**

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 in Windows 7.\*

**DRC\_INSIGHT\_Setup.msi /qn**

### **Silent Uninstall Example**

The following example shows the syntax you would use to uninstall INSIGHT silently in Windows 7.\*

**msiexec /x DRC\_INSIGHT\_Setup.msi /qn**

\*For Microsoft Windows 8, use /qb instead of /qn.