



Supported System Requirements

Effective October – January 2017

This document describes the current system requirements for the DRC INSIGHT Online Testing System and the Testing Site Manager (TSM). These requirements cover the following items:

- Hardware devices
- Accessories and peripherals
- Operating systems and levels
- Processor, disk space, and memory
- Screen size and resolution
- Certain testing accommodations

DRC aggressively seeks out, validates, and adopts new technology to offer the best testing solutions to our customers while keeping pace with constantly changing and evolving technology standards. In general, DRC software applications offer Best Effort Support of new versions of an operating system within one month of public availability of the new version and Full Support within three months of public availability of the new version, or by the next release date of the DRC application, whichever duration is greater.

Q4 Update: October 12, 2016
Next Update: January 2017

DRC INSIGHT and TSM Supported System Requirements

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UPDATE: Support Starting and Ending

The following is a quick overview of upcoming changes to the hardware and software supported for DRC INSIGHT and/or the TSM. For details, see the appropriate section.

Device Support Beginning

NA

Software Support Beginning Fall 2016

- macOS Sierra
- iOS 10.0.x, 10.1
- Android 7.0
- Windows Server 2016

Device Support Ending

NA

Software Support Ending

Mac OS X 10.9 (July 2017)

Device Support Ended

NA

Software Support Ended

Windows Vista, SP2
Windows 8
Windows Server 2008, SP2
Mac OS X 10.7
Mac OS X 10.8

UPDATE: What's New or Coming Soon

The following is a snapshot of significant DRC software and hardware updates and enhancements, planned for the near future.

Available Now: New 64-Bit Version of the TSM

DRC has released a 64-bit version of the TSM for the 2016–2017 school year. The 64-bit TSM can support a larger number of concurrent testers per TSM compared to the 32-bit version. For details, see the DRC TSM Device Requirements.

DRC Device Support Policy

Typically, when a hardware vendor, such as Dell or Lenovo, discontinues a hardware device, the software vendor that provides the operating system support for that device continues supporting the device for a period of time. Therefore, for any device that DRC adds to its fully supported device list, DRC will continue to support the device until the software vendor officially discontinues support for the device.

Device Categories

DRC's approach is to test and certify our software on the devices most commonly used in the classroom. As a result of its testing, DRC groups devices into the three categories described in the table below.

Device Category	Description
Fully Supported	DRC has evaluated and tested the device. It is suitable for testing with DRC INSIGHT and/or the TSM*.
Not Suitable For Online Testing	DRC has evaluated and tested the device. For various reasons, it is unacceptable for testing with DRC INSIGHT and/or the TSM.
Other	Any device that does not fit into the other categories falls into this category. DRC has neither evaluated nor tested the device—it may or may not be suitable for testing with DRC INSIGHT and/or the TSM.

*Certain devices, such as iPad devices or Chrome devices, can be used for DRC INSIGHT, but not for the TSM software.

IMPORTANT

Sites that tested online using DRC INSIGHT in 2015–2016 with satisfactory results should be able to use the same testing devices in the 2016–2017 school year.

Assumptions

- The site's DRC INSIGHT software is up to date
- Critical variables, such as the available network bandwidth and network configuration, have not changed since the last testing cycle

Sites that *did not* test online using DRC INSIGHT in 2015–2016, or that are examining their current testing configurations, can use the specifications in the following tables as a guideline for future considerations and equipment purchases related to online testing.

Minimum vs. Recommended

Throughout this document, the Minimum level of requirements represents a low compliance threshold. DRC advises using the Recommended level or above. The Recommended level is required for testing with accommodations such as Human Voice Audio (HVA), Text To Speech (TTS), and Video Sign Language (VSL).

DRC INSIGHT Device Requirements

The tables that follow indicate the current DRC INSIGHT device requirements, as well as the devices that DRC fully supports and the devices that are known to be unsuitable for online testing.

Fully Supported Devices	Processor	Memory	Unused Disk Space	Screen Size	Resolution
<p><u>Windows</u> Non-touch-screen devices The following touch-screen devices: Windows ASUS Transformer Flipbook TP200 Windows Acer TravelMate B117 Lenovo Yoga – Netbook/Tablet Dell Latitude – Laptop Microsoft Surface Pro – Tablet</p>	<p><u>Minimum</u> Dual-core i3 at 1.4 GHz or equivalent</p> <p><u>Recommended</u> Dual-core i5 at 2 GHz or equivalent</p>	<p><u>Minimum</u> 2 GB RAM</p> <p><u>Recommended</u> 4 GB RAM</p>	<p><u>Minimum</u> 10 GB</p> <p><u>Recommended</u> 20 GB or more</p>	<p>Non-touch-screen devices:</p> <p><u>Minimum</u> 9.5”</p> <p><u>Recommended</u> 13” or larger</p> <p>Touch-screen devices:</p>	<p><u>Minimum</u> 1024 x 768</p> <p><u>Recommended</u> 1024 x 768 or higher</p>
<p><u>Mac (OS X and macOS) and Linux</u> Non-touch-screen devices only</p>					
<p><u>Chrome OS</u> Non-touch-screen devices The following touch-screen devices: Acer C720P Acer Chromebook R 11 C738T ASUS Chromebook Flip C100PA Chromebox Dell Chromebook 11 HP Chromebook 14 G3 Lenovo N20P</p>	<p><u>Minimum</u> 1.4 GHz or faster</p> <p><u>Recommended</u> 2 GHz or faster</p>	<p><u>Minimum</u> 2 GB RAM or more</p> <p><u>Recommended</u> 4 GB RAM or more</p>	<p>NA</p>	<p><u>Minimum</u> 10”</p>	
<p><u>Apple iOS</u> iPad 2 or newer iPad Air devices iPad Pro Devices: 9.7” and 12.9” Note: iPad mini devices are not supported.</p>	<p>NA</p>	<p>NA</p>	<p>NA</p>	<p>9.7” or greater</p>	
<p><u>Android</u> ASUS Transformer Pad TF103CE (also known as the K010E) Dell Venue 10, model 5050 Google Pixel C</p>	<p>NA</p>	<p>NA</p>	<p>NA</p>	<p><u>Minimum</u> 10”</p>	

Additional DRC INSIGHT Device Specifications

Supported Accessories

- Mouse
- English language keyboard (internal and external, wired and wireless)
- Touchpad
- Headphones
- Microphone
- Earphones
- Earbuds
- Stylus for touch devices
- Other input devices as supported for accommodations (determined in conjunction with each state department of education)

The input device must allow students to select and deselect; drag items; highlight text, objects, and areas; enter letters, numbers, and symbols; use the Shift, Tab, Return, Delete, and Backspace keys.

Other

Smart Board interfaces are not supported

Internet Connectivity

Minimum

Devices must be able to connect to the Internet using wired or wireless networks

Recommended

Devices connected via wired network

Wi-Fi Recommendations

If you plan to test using a wireless network, complete a wireless site survey to ensure that there is sufficient wireless coverage in testing areas. This survey should address coverage, and verify that students can take the test in the same area of the building at one time (device density). The survey should account for Internet bandwidth and other traffic in the building at the time of testing, including LAN (wireless and wired) traffic, WAN traffic.

Power Supply

Minimum

For battery devices, a fully charged battery with a two-hour life

Recommended

Device connected to a plugged-in power supply

Accommodations

A TSM is required for Human Voice Audio (HVA), Text-To-Speech (TTS), and Video Sign Language (VSL), which have increased TSM memory and disk space requirements (see **DRC TSM Device Requirements**)

DRC TSM Device Requirements

IMPORTANT

Sites that tested online using the Testing Site Manager (TSM) in 2015–2016 with satisfactory results should be able to use the same TSM hardware in the 2016–2017 school year.

Assumptions

- The site's DRC INSIGHT and TSM software is up to date
- Critical variables, such as the number of testers (concurrent and otherwise), available network bandwidth and network configuration have not changed since the last testing cycle
- The site is not planning to test using unsupported operating systems or devices

Sites that *did not* test online using the Testing Site Manager (TSM) in 2015–2016, or that are examining their current testing configurations, can use the specifications in the table on the following page as a guideline for future considerations and equipment purchases related to the TSM.

DRC TSM Device Requirements (cont.)

The following table describes the processor, memory (RAM), and available disk space requirements for the 32-bit TSM and the 64-bit TSM based on the accommodations provided—HVA, TTS, VSL, and the number of testers testing concurrently. The Recommended level is required for testing with accommodations such as HVA, TTS, and VSL because of the size of video and audio files.

TSM Version	Supported Devices	Number of Concurrent Testers	Processor	Available Memory	Minimum Available LAN Bandwidth	Available Disk Space
32-bit TSM	32-bit Windows and Linux desktop and laptop devices	1–25	<u>Minimum</u> Dual-core i3 at 2.4 GHz or equivalent <u>Recommended</u> Dual-core i5 at 2.4 GHz or equivalent	<u>Minimum</u> 2 GB RAM <u>Recommended</u> 4 GB RAM <u>Audio Accommodations</u> 4 GB RAM	50 Mb	<u>Minimum</u> 10 GB <u>Recommended</u> 20 GB or more
		26–150	<u>Minimum</u> 2x dual-core i5 at 2.4 GHz or equivalent <u>Recommended</u> 2x dual-core i5 at 2.4 GHz or equivalent		100 Mb	<u>Audio Accommodations</u> 20 GB or more
64-bit TSM	64-bit Windows, Mac (OS X and macOS), and Linux desktop and laptop devices	1–25	<u>Minimum</u> Dual-core i3 at 2.4 GHz or equivalent <u>Recommended</u> Dual-core i5 at 2.4 GHz or equivalent	<u>Minimum</u> 2 GB RAM <u>Recommended</u> 4 GB RAM <u>Audio Accommodations</u> 4 GB RAM	50 Mb	<u>Minimum</u> 10 GB <u>Recommended</u> 20 GB or more
		26–150	<u>Minimum</u> 2x dual-core i5 at 2.4 GHz or equivalent <u>Recommended</u> 2x dual-core i5 at 2.4 GHz or equivalent		100 Mb	<u>Audio Accommodations</u> 20 GB or more
		151–500	4x dual-core i5 at 2.4 GHz or equivalent	8 GB RAM	200 Mb	

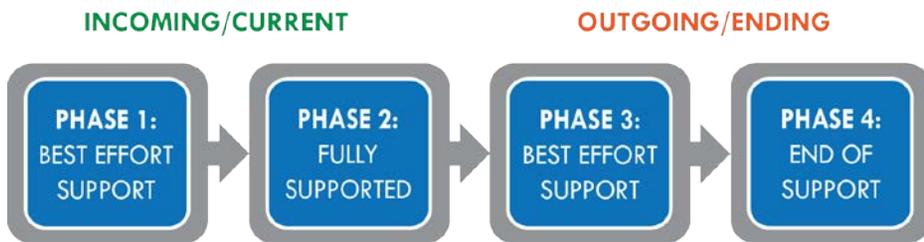
Important

- The TSM **should not** be installed on mobile or touch-screen devices.
- The TSM **should be** connected to the network through a wired connection.
- A TSM configured for response caching can handle fewer concurrent testers when response caching is active.

DRC Software Support Policy

When a software vendor, such as Microsoft or Apple, ends support for an operating system (or level), they discontinue free security updates for that software. This can present large and immediate security and support risks to the software's users. As a result, DRC strongly recommends that all clients affected by the end of support process begin the transition as soon as possible to allow sufficient time for the process.

Support Timeline



To accomplish the dual goals of minimizing security risks to DRC clients while making necessary software changes, DRC has established a multi-phase support timeline for the transition from an unsupported operating system or level to a supported operating system or level.

Note: DRC assumes no responsibility or liability for software transition processes at testing sites.

Phases 1 and 3: Best Effort Support

The DRC Support team will help troubleshoot issues reported concerning the operating system or level and DRC software applications as best we can, but DRC cannot guarantee a resolution.

If a problem is uncovered, DRC Support will report the issue to DRC Development. Again, we cannot guarantee a fix, software update, or resolution timeline for software fixes or updates. If DRC determines that an issue is related to a client's network, hardware, or third-party software, the client must obtain support directly from the software vendor or the hardware manufacturer.

Best Effort Support occurs at both ends of the software lifecycle.

- *Phase 1: After DRC software testing begins and before the software is fully supported by DRC.* DRC offers Best Effort Support for any new version of a supported operating system (OS) product within 30 days of public availability of the OS product version, or by the next planned common or client-specific release date of the DRC application, whichever duration is greater.
- *Phase 3: After the software is no longer supported by the vendor and before the end of DRC support.* Once the OS product version has reached the end of vendor support, DRC offers Best Effort Support until the next planned common or client-specific release date of the DRC application, at which point it is restricted from use unless DRC chooses to extend support.

Phase 2: Fully Supported

When an OS product is on the DRC supported product list, DRC performs application testing for all major versions of the product publically supported by the product vendor and for all minor versions of the product when DRC deems testing is necessary. Any new version of a supported OS product will be Fully Supported by all DRC applications within 90 days of public availability of the version of the OS product, or by the next planned common or client-specific release date of the DRC application, whichever duration is greater.

Phase 4: End of Support

The next release of DRC software applications will not work with the unsupported operating system or level. It is restricted from use.

The table that follows indicates the current supported operating system levels for DRC INSIGHT and the TSM. It also provides a timeline for changes in terms of the various support phases.

DRC INSIGHT Software Requirements: Supported Operating System Levels and Support Timeline

Operating System	Level	Incoming/Current		Outgoing/Ending	
		Phase 1: Best Effort Support	Phase 2: Fully Supported**	Phase 3: Best Effort Support	Phase 4: End of Support***
Windows	Windows 7, SP1		X****		
	Windows 8.1		X		
	Windows 10, latest version for Current Branch (CB) and Current Branch for Business (CBB)*		X		
	Windows Server 2008, R2 SP1		X		
	Windows Server 2012		X		
	Windows Server 2012, R2		X		
	Windows Server 2016	X	November 2016 (anticipated)		

DRC fully supports the most recent version of Windows 10 available for the CB and CBB servicing options. DRC will offer Best Effort support for previous versions of Windows 10 available for the CB and CBB that Microsoft maintains support for with servicing updates.

** DRC recommends using operating system levels that are Fully Supported.

*** When end of support occurs during a typical testing cycle, DRC will continue to provide Best Effort support until the testing cycle ends. DRC recommends that sites upgrade to a fully supported level before the testing cycle begins.

**** **X** indicates the current level of support.

DRC INSIGHT Software Requirements: Supported Operating System Levels and Support Timeline (cont.)

Operating System	Level	Incoming/Current		Outgoing/Ending	
		Phase 1: Best Effort Support	Phase 2: Fully Supported [*]	Phase 3: Best Effort Support	Phase 4: End of Support ^{**}
Mac (OS X) Note: Mac server software is not supported.	OS X 10.9			X ^{***}	July 2017
	OS X 10.10		X		
	OS X 10.11		X		
	macOS Sierra	X	November 2016 (anticipated)		
Linux Note: Linux server software is not supported.	Ubuntu 12.04 LTS version, with 32- and 64-bit Gnome 3.4, Unity Shell		X	April 2017	July 2017
	Ubuntu 14.04, LTS version, with 32- and 64-bit Gnome 3.4, Unity Shell		X	April 2019	July 2019
	Ubuntu 16.04, LTS version, with 32- and 64-bit Gnome 3.4, Unity Shell		X		
iOS	9.3.x		X		
	10.0.x	Fall 2016 (anticipated)	Winter 2016–2017 (anticipated)		
	10.1	Fall 2016 (anticipated)	Winter 2016–2017 (anticipated)		
Chrome	Chrome OS recent stable channel		X		
Android	Lollipop 5.x		X		
	Marshmallow 6.x		X		
	Android 7.x (Nougat)	Fall 2016 (anticipated)	December 2016 (anticipated)		

^{*} DRC recommends using operating system levels that are Fully Supported.

^{**} When end of support occurs during a typical testing cycle, DRC will continue to provide Best Effort support until the testing cycle ends. DRC recommends that sites upgrade to a fully supported level before the testing cycle begins.

^{***} **X** indicates the current level of support.

DRC TSM Software Requirements

The DRC TSM software requirements are the same as the DRC INSIGHT requirements with the exception that the TSM software cannot be installed on an iOS, Chrome, or Android device. The TSM software will work with INSIGHT software installed on these devices.

- The 32-bit version of the TSM runs on non-touch Windows desktop and laptop devices, and Linux desktop and laptop devices.
- The 64-bit version of the TSM runs on non-touch Windows desktop and laptop devices, non-touch Mac (OS X and macOS) desktop and laptop devices, and Linux desktop and laptop devices.