Supported System Requirements
for ACCESS for ELLs 2.0 and Screener

Effective June–September 2018

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

- o **Hardware devices**
- o **Accessories and peripherals**
- o **Operating systems and levels**

- o **Processor, disk space, and memory**
- o **Screen size and resolution**

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.

Current Update: June 14, 2018
Next Update: October 2018

This document is updated three times each calendar year.

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

DRC no longer lists specific supported devices for Windows and Chrome OS. DRC will support devices (including touch-screen devices) that meet the minimum system requirements.

Device Support Ending

iPad 4th Generation (July 2018)*****

**This device is not capable of running iOS 10.x or newer releases. Apple ended support for iOS 10.x in September of 2017. DRC Support for iOS 10.x ends in July of 2018, resulting in the end of support for this device.*

Device Support Ended

NA

Software Support Beginning

NA

Software Support Ending

Mac OS X 10.10 (July 2018)
iOS 10.3.x (July 2018)
Ubuntu 14.04 (July 2019)

Software Support Ended

NA

Minimum vs. Recommended

Throughout this document, the Minimum level of requirements represents a low compliance threshold. Districts or schools planning to test more than a minimum number of students should exceed the minimum level of requirements. DRC advises using the Recommended level or above.

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. Device manufacturers use different methods to implement touch-enabled screens for their devices, with the technology evolving over time. DRC typically tests DRC INSIGHT with touch devices made by the most common manufacturers for educational settings. Generally speaking, DRC INSIGHT will operate effectively on similar touch-screen models and DRC will provide best effort support for these models.

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

DRC INSIGHT Testing Device Requirements for ACCESS for ELLs 2.0 and Screener

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

Fully Supported Devices	Processor	Available Memory	Unused Disk Space	Screen Size	Resolution
Windows Both touch-screen and non-touch-screen devices that meet the requirements in this table **Mac (OS X and macOS) and Linux** Non-touch-screen devices only	**Minimum** Intel 4th Generation Core i3 4005U (or AMD equivalent) Intel 5th Generation Celeron N3050 (or AMD equivalent) **Recommended** Intel 6th generation product family or greater (or AMD equivalent)	**Minimum** 2 GB RAM **Recommended** 4 GB RAM	**Minimum** 10 GB **Recommended** 20 GB or more	**Minimum** 9.5"	**Minimum** 1024 x 768
Chrome OS Both touch-screen and non-touch-screen devices that meet the requirements in this table	**Minimum** Intel 4th Generation Celeron 2955U (or AMD equivalent) **Recommended** Intel 6th generation product family or greater (or AMD equivalent)	**Minimum** 2 GB RAM or more **Recommended** 4 GB RAM or more	NA—See the **Important Notes** that follow the table		
Apple iOS iPad 2017 iPad 2018 iPad Air devices iPad Pro Devices: 9.7", 10.5", and 12.9" **Note:** iPad mini devices **are not** supported.	NA	**Minimum** 1 GB if no other Apps are running and wireless network connectivity is optimized **Recommended** 2 GB See the **Important Notes** that follow the table	NA—See the **Important Notes** that follow the table	9.7" or greater	**Minimum** 1024 x 768

Important Notes

Tablet/Netbook/Chromebook Devices

Because tablet/Netbook/Chromebook devices are not easily configurable for memory and storage (disk space) upgrades, DRC recommends that these devices be streamlined for the DRC INSIGHT App when used for testing.

To achieve this goal, all applications and features that are unnecessary for testing should be disabled, removed, or turned off to ensure that the maximum amount of device memory is available for testing. This includes services such as Bluetooth (unless a Bluetooth keyboard or mouse is needed), GPS, and power saving modes that reduce performance to maximize battery life.

DRC also recommends rebooting these devices before testing.

These activities help free available memory. Devices that lack sufficient memory during testing may experience issues.

IPA Software

Intelligent personal assistant (IPA) software, such as Siri for iOS and macOS, or Cortana for Windows 10, should be disabled during testing for the appropriate devices. In some cases, this functionality can be disabled automatically using administrator controls such as Mobile Device Management (MDM) software.

If IPA software is not disabled, the testing site is responsible for ensuring the security and integrity of the test by actively monitoring that students are not using this capability during the test.

Chrome OS Support and Chrome Devices

DRC offers the following levels of support for Chrome OS for the 2018–2019 testing season:

- Full Support for the current stable channel level
- Best Effort Support for stable channel levels between level 66 and the current stable channel level
- End of Support (no support) for stable channel levels below 66

Based on these support levels, DRC recommends replacing any Chrome devices that have reached, or will reach, End of Life (EOL) within the 2018-2019 school year. For reference, use the following link to help determine the EOL of a specific Chrome device: https://support.google.com/chrome/a/answer/6220366

Automatic Operating System Updates and Other Background Processes

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.

Additional DRC INSIGHT Device Specifications

Supported Accessories	
o Mouse o English language keyboard (internal and external, wired and wireless) o Touchpad	o Stylus for touch devices o 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

Headsets
o Headset with microphone (see the link below) o Recommendations for Headset Specifications

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

Wi-Fi Recommendations
The maximum number of devices a Wireless Access Point (WAP) can support varies depending on the manufacturer and model of the WAP device being used for testing. DRC recommends never exceeding 80% of the maximum capacity of the WAP specified by the manufacturer. For example, for a WAP device with a maximum capacity of 20 concurrently connected devices, DRC recommends that no more than 16 devices be connected concurrently. If the number of concurrently connected devices is expected to exceed this threshold, additional WAPs should be implemented. Note that all other networking hardware must be able to accommodate the maximum number of devices that could potentially be connected to the wireless network concurrently. 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. For more information, see the *Site Technology Readiness Checklist for Deploying WIDA Online Assessments*.

Power Supply	
Minimum	**Recommended**
For battery devices, a fully charged battery with a two-hour life	Device connected to a plugged-in power supply

DRC TSM Device Requirements for ACCESS for ELLs 2.0 and Screener

The following table lists the supported devices, number of concurrent testers, processor, memory (RAM), LAN bandwidth, and available disk space requirements for both the 32-bit and 64-bit versions of the TSM. Note that these requirements apply across all domains of WIDA testing.

| Test	TSM Version	Supported Devices	Number of Concurrent Testers	Processor	Available Memory	Minimum Available LAN Bandwidth	Available Disk Space
All Domains— Reading, Writing, Listening, and Speaking	32-bit TSM	32-bit Windows, Mac (OS X and macOS), and Linux, desktop and laptop devices	1–25	2x dual-core i5 at 2.4 GHz or equivalent	2 GB RAM	50 Mb	20 GB or more
			26–150	2x dual-core i5 at 2.4 GHz or equivalent	4 GB RAM	100 Mb	
	64-bit TSM	64-bit Windows, Mac (OS X and macOS), and Linux desktop and laptop devices	1–25	2x dual-core i5 at 2.4 GHz or equivalent	2 GB RAM	50 Mb	20 GB or more
			26–150	2x dual-core i5 at 2.4 GHz or equivalent	4 GB RAM	100 Mb	
			151–275	4x dual-core i5 at 2.4 GHz or equivalent	8 GB RAM	200 Mb	

Important Notes

- 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 is optional. For the Writing test, the TSM can handle fewer concurrent testers if 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
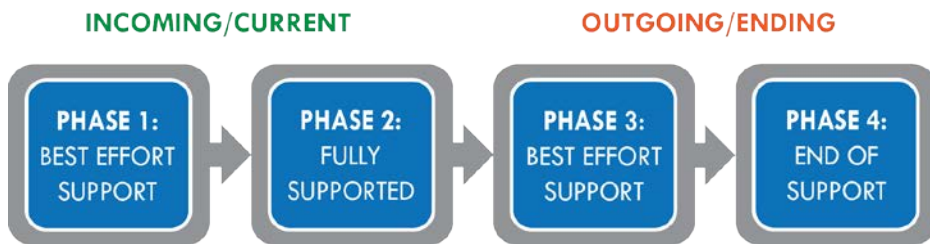
To accomplish the dual goals of minimizing security risks to DRC clients while making necessary software changes, DRC has established a multi-phase support timeline for the transition from an unsupported operating system or level to a supported operating system or level.

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.

o *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.

o *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 publicly 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[①]	Phase 3: Best Effort Support	Phase 4: End of Support[②]
Windows	Windows 7, SP1		X[③]		
	Windows 8.1		X		
	Windows 10 Semi-Annual Channel servicing options[④]		X[⑤]		
	Windows 10 S mode of the Windows 10 operating system[⑥]		X (anticipated late summer 2018)		
	Windows Server 2008, R2 SP1		X		
	Windows Server 2012		X		
	Windows Server 2012, R2		X		
	Windows Server 2016		X		

① DRC recommends using operating system levels that are Fully Supported.

② 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.

③ **X** indicates the current level of support.

④ DRC currently supports the Home, Pro, Enterprise, and Education editions of Windows 10. We do NOT currently support the Windows 10 S configuration of Windows Pro.

⑤ DRC fully supports the most recent version of Windows 10 available for the Semi Annual Channel servicing options within 90 days of public availability of the new version. DRC will offer Best Effort support for previous versions of Windows 10 available for the Semi Annual Channel servicing options that Microsoft maintains support for with servicing updates. For details, see the Microsoft Windows 10 version support website.

⑥ DRC does not currently support the Windows 10 S mode of Windows 10. We anticipate a fully supported Windows App to be available by end of summer, 2018.

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[①]	Phase 3: Best Effort Support	Phase 4: End of Support[②]
Mac (OS X and macOS) **Note:** Mac server software is not supported.	OS X 10.10			**X**[③]	July 2018
	OS X 10.11		**X**		
	macOS 10.12		**X**		
	macOS 10.13		**X**[④]		
Linux **Note:** Linux server software is not supported.	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**		
	Ubuntu 18.04, LTS version Gnome Shell	**X**	July 2018 (anticipated)		
iOS	10.3.x			**X**	July 2018
	11.x (latest version)[⑤]		**X**		
Chrome	Chrome OS recent stable channel		**X**		

① DRC recommends using operating system levels that are Fully Supported.

② 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.

③ X indicates the current level of support.

④ The macOS 10.13 software is currently Fully Supported for testing devices. To use a TSM with macOS 10.13, you must use the URL https://localhost:8443 to access the TSM.

⑤ See the iOS Release Strategy Note that follows.

iOS Release Strategy Note

The iOS release strategy provides both major and minor release versions.

- Major release versions are indicated by the number to the left of the decimal point. For example, release 11.x and release 12.x are major release versions.

- Minor release versions are indicated by the number to the right of the decimal point. For example, release 11.1 and release 11.2 are minor release versions of major release version 11.

DRC supports both types of release versions.

- DRC fully supports the most recent **major release version** of iOS within 90 days of public availability of the new version. During the 90 days of testing/verification, DRC provides Best Effort Support of the new major release version.

- DRC provides Best Effort Support for **minor release versions** of iOS as soon as they are made available to the public and will fully support these versions as soon as DRC completes testing/verification. DRC will attempt to fully support minor release versions within 30 days of their release.

Note: DRC will offer Best Effort Support for any previous versions of iOS for which Apple maintains 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 or Chrome 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.

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