



Fall 2012 Online Social Studies Pilot



MIST™

(Measurement Incorporated Secure Testing)

Technical Guide

Overview

MIST

The Measurement Incorporated Secure Testing system (MIST™) is a secure test delivery system. It has two interfaces: one for students and one for the test administrator(s). It uses a small client program and an active internet connection to the server at Measurement Incorporated to securely deliver test content to students.

MIST Technical Guide

This document contains

- A checklist of tasks for preparing your testing computers and school network for online testing using MIST
- Instructions for downloading MIST
- MIST Technical Specifications

The checklist and the information regarding technical specifications in this document are very important to having a successful experience with MIST. The two most important things you can do to ensure a successful test administration are

- 1. Maximize the bandwidth available to testers**
- 2. Configure all needed permissions to allow traffic to and from the MIST servers by the MIST software**

Training students and test administrators on their respective interfaces is also helpful.

NOTE: For a checklist of steps to use in preparing test administrators and technical support to use the MIST system, a day-of-testing checklist, and a MIST self-training checklist, please refer to the *Fall 2012 Online Social Studies Pilot MEAP Test Administrator Quick Start Guide to MIST*.

All staff involved with testing should familiarize themselves with the following documents:

- Fall 2012 MEAP Online Social Studies Pilot Test Administration Manual
- Fall 2012 Online Social Studies Pilot MEAP Test Administrator Quick Start Guide To MIST
- MIST Frequently Asked Questions (FAQ)

Checklist to Prepare for Online Testing

To prepare your computers and network for online testing using MIST, **complete the tasks on the checklist below:**

1. Verify that your testing computers and network meet the minimum technical specifications for running MIST. These requirements are listed on **page 5** of this document.

2. Configure network firewalls, proxy servers, content filters, parental controls, malware finders, Internet Explorer® student user profile, and antivirus software to whitelist

- mist.exe
- <https://mi.misttest.com>

and open ports 80 and 443 to MIST traffic. More detailed information on performing this task can be found on **page 5** of this document.

3. Minimize interference with testing:

- Turn off any **power saver options** on testing computers.
- Plug in laptops during testing and make sure that the system clock battery on laptops is fresh.
- Schedule automatic updates to occur outside of school hours.
- **Plan for school personnel and students to avoid using bandwidth-intensive applications and websites during testing.**

4. Download the *mist.exe* application and place a copy on each testing computer's hard drive in a location that is accessible to users with student-level permissions. We suggest making the icon visible on the student's desktop.



5. Verify that each machine's settings allow a student-level user to open the application *mist.exe*. Details on this task appear on **page 3** of this document under the heading *To Verify that Settings Affecting a Testing Computer Are Compatible with MIST*.

If you have any questions or concerns about preparing for online testing, please contact the MEAP Call Center at 877-560-8378, option 2 for assistance. We are here to help!

Download MIST

To download the MIST application:

1. Open a browser.
2. Navigate to <https://mi.misttest.com>
3. Login with the credentials below.

Username: MEAPAdmin2012

Password: MEAPAdmin2012

4. Click on the Downloads link (to the left of the screen) to go to the Downloads area of the test administrator website.
5. Click on the MIST download button that corresponds with your operating system. Your download should begin via your default browser.

If your download does not start automatically, please call the MEAP Call Center at 877-560-8378, option 2 for assistance.

For **Windows**, a stand-alone application (MIST.EXE) will download.

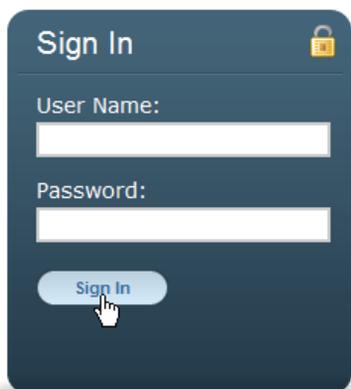
For **Macintosh**, a compressed file (MIST.zip) will download and automatically expand to an application file (MIST.app).

For **Linux**, a package (MIST.deb) will download that must be installed by a system administrator.

MIST can be downloaded once and then deployed across the network using any available network management tools. It can also simply be copied into the correct destination folder on each hard drive from a flash drive or other portable data storage device.

To Verify that Settings Affecting a Testing Computer Are Compatible with MIST

1. Log into the computer operating system with student-level credentials.
2. Double-click on the MIST icon on the testing computer desktop.
3. If you see the login screen below, the settings affecting the testing computer at that time are allowing *mist.exe* to contact the MIST server.



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4. Complete the Fall 2012 MEAP Social Studies System Check.

Please complete the Fall 2012 MEAP Social Studies System Check on each unique hardware/software configuration in your testing computer group. Follow steps 1) through 10) below.

- 1) Log into the operating system with a student-level user profile.
- 2) Verify that you can see the MIST icon on the student-level user's desktop.
- 3) Double-click the icon to start MIST.
- 4) Log into the executable with the credentials below and click LOGIN.

Username: MEAPAdmin2012

Password: MEAPAdmin2012

You will now be looking at the student roster of imaginary students.

- 5) Click on a student name to select it from the list of imaginary students. Click the NEXT button (lower right).

You will now be looking at the list of tests the student is enrolled for.

- 6) Click on a test name (in this case the *Fall 2012 MEAP Social Studies System Check*) to select it from the list of tests. You must select a test even if there is only one test. Click the NEXT button (lower right). You will now be looking at the CONFIRMATION screen.
- 7) Click CONFIRM to create the Tester Station. You will now be looking at the Welcome screen.
- 8) Click START TEST in the lower right.
- 9) Click through the screens of the test. The first time, you might try leaving some questions unanswered so that you can see the warning message to students who do not answer all of the questions.
- 10) Call the MEAP Call Center at 1-877-560-8378, option 2 with any questions.

Network Capacity

Your experience will be best if you are able to provide **at least 50kb/s** per student during testing. You can use the worksheet below to estimate the amount of bandwidth per student your network can accommodate. Please read the **NOTE** below the worksheet.

1)	Enter the total bandwidth of your network in kb/s. If you share your bandwidth, use the portion that is allocated to your school as your total bandwidth when making your estimations. Use the slower of the upload or download speed to make your estimate.	kb/s
2)	Enter the total number of students who will be testing concurrently (≤ number of available computers).	
3)	Divide line 1 by line 2 and enter the result here. Your answer should be 50kb/s or greater.	kb/s

NOTE: You can maximize the tester benefit of your school's network capacity by taking steps to limit competition for bandwidth by non-testers. Students and teachers should be asked not to use bandwidth-intensive tasks such as streaming video from the internet or downloading files.

MIST Technical Specifications

Minimum System Requirements

Category	WINDOWS	LINUX	MACINTOSH
Processor	Pentium® II 450 MHz PC or faster	Pentium® II 450 MHz PC or faster	PowerPC® G3 500MHz or faster Any Intel x86-based Macintosh
RAM	256 MB	256 MB	256 MB
Operating Systems	Windows 2000, XP, Vista, and 7	Ubuntu 9.04 or later (kernel 2.6.28 or later)	Mac OS X v10.4 or later
Internet Browsers*	Microsoft Internet Explorer 7.0 or later Firefox 3.6 or later Chrome 13.0 or later Safari 3.0 or later	Firefox 3.6 or later Chrome 13.0 or later	Firefox 3.6 or later Chrome 13.0 or later Safari 4.0 or later
Resolution** **Smaller screens are at the discretion of the BAA on a case-by-case basis.	800 x 600 pixels, 16-bit color	800 x 600 pixels, 16-bit color	800 x 600 pixels, 16-bit color
Internet Access	High-speed internet	High-speed internet	High-speed internet
Additional Hardware Requirements	Mouse Keyboard	Mouse Keyboard	Mouse Keyboard
Additional Software***	QuickTime	QuickTime	QuickTime

* A browser is not required to take a test. A browser is required to download the application, to use the practice tests, and to use the MIST Proctor Website.

*** QUICKTIME is NOT required to conduct testing. QuickTime is ONLY required to watch the MIST Training Video.

Network Permissions Configuration Information

Category	Specification	Description
Content Filters, Parental Controls	Check all content filters and parental controls and whitelist the URL and exe.	For Macintosh, please turn the built-in OS parental controls off. For Windows, the student-level Internet Explorer user options should have Content Advisor set to accept https://mi.misttest.com as an approved site. Any other content filters and parental controls in use should be configured to allow all traffic to our URL and all activity by our executable.
Firewalls, antivirus, anti-malware	Port 80 and 443 must be open. Whitelist the URL and exe.	Port 80 and 443 are used to establish a connection, and are used during the test. Web services are used for communication between the client and server during testing and proctoring.
Proxy bypass	https://mi.misttest.com <i>mist.exe</i> Port 443	This information may be required to bypass a proxy server. The program asks for the URL address in the format specified.

Accommodations

Highlighter (universal accommodation)

The highlighter tool is provided on all screens except for the confirmation screen and the exit screen.

The highlighter tool is located in the upper right corner of the student's Tester Station screen. The student clicks on the tool to activate it.

To highlight text:

- Left click and drag to select text. Your selected text will turn yellow
- Release over the selected text. Your selected text will stay yellow

To remove highlighting:

- Hover over highlighted text. You will see a red .
- Click anywhere in the highlighted text to remove the yellow highlighting

The student's highlighting will remain on that screen until removed, even if the test must be paused and resumed at a later time

Zoom Levels (universal accommodation)

The zoom tool is provided on all screens. The zoom tool is not a substitute for a large-print test. Levels of magnification are 0.65x, 0.8x, 1.0x, 1.25x, 1.6x, and 2.0x.

Special Keyboards

Most special keyboards (e.g., Intellikeys™) are compatible with the MIST application and should work properly on machines that meet the minimum OS requirements (see MIST Technical Specifications).

Touch Screen Monitors

Most touch screen monitors (e.g., Hyvision MV155 Touch LCD) that meet the minimum resolution requirements (see MIST Technical Specifications) are compatible with the MIST application and should work properly on machines that meet the minimum OS requirements.

Further Assistance:

If you have any questions or if we can provide any additional assistance, please contact the MEAP Call Center at 1-877-560-8378, option 2.