



myitlab for Office 2010 Simulation Deployment

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Summary

The purpose of this document is to describe how the myitlab Office 2010 Simulator (simulation) functions and how to best deploy it in a lab environment as well as on student computers. The target audience for this document is lab administrators.

How does the myitlab simulation function?

When a student launches a simulation from myitlab, the myitlab ActiveX control (named **Enlite 2.x Simulation Engine Installer**; file name stub.ocx) is invoked on the local computer. Before the simulation activity can launch, myitlab confirms that all of the files needed to run that activity reside on the computer, and that all of these files are the most current ones available. If this validation fails, myitlab initiates a download of the required files. After all of the required files have been verified, the main simulation application launches and the subordinating DLLs are called as needed.

Results, including clickstream data, are sent back to the server after the student completes each question. When the activity is complete, the simulation sends all of the activity data and finalizes the submission on the server. For more information, please reference the myitlab Lab Admin guide available on myitlab.com.

What files are downloaded and where are they stored?

In addition to the ActiveX control, there are two types of required files used to run a myitlab simulation activity: the sim engine system files (myitlab2010.exe and various DLLs) that are used to simulate the Office applications and the content-specific activity files. The simulator also requires Adobe Flash Player (v9.0 or higher) and Adobe Reader (v7.0 or higher).

As shown in the following table, the sim engine system files are all stored in a **myitlab2010** folder. All of the activity-specific files that are used in the launched activity are stored in a **resources** subfolder.

The ultimate goal is to have all of these files in place before a student launches a myitlab simulation activity.

	File Name/Types	Windows XP®	Windows Vista®
ActiveX control	<ul style="list-style-type: none"> Enlite 2.x Simulation Engine Installer (file name: stub.ocx) 	When installed manually using setup.exe: C:\WINDOWS\system32 When installed using wizard: C:\WINDOWS\Downloaded Program Files	When installed manually using setup.exe: C:\Windows\system32 When installed using wizard: C:\Windows\Downloaded Program Files
Sim Engine System Files	<ul style="list-style-type: none"> myitlab2010.exe DLLs for each Office application 	C:\Documents and Settings\ All Users\Application Data\myitlab2010	C:\ProgramData\myitlab2010
Content-specific resource files	<ul style="list-style-type: none"> *.TAIT files Question files Graphics Font files 	C:\Documents and Settings\ All Users\Application Data\myitlab2010\resources	C:\ProgramData\myitlab2010\resources

Note: The ActiveX control adds the following registry keys to HKEY_LOCAL_MACHINE\SOFTWARE\Classes\...
 ...CLSID\{B3E32D88-8E7F-468f-B0E2-3A300FD4A82C}\Implemented Categories\{7DD95801-9882-11CF-9FA9-00AA006C42C4}
Windows XP ...CLSID\{B3E32D88-8E7F-468f-B0E2-3A300FD4A82C}\Implemented Categories\{7DD95802-9882-11CF-9FA9-00AA006C42C4}
Windows Vista ...Zeus.Enlite20Ctrl.1\CLSID\{B3E32D88-8E7F-468f-B0E2-3A300FD4A82C}

Before launching, the simulation ensures that the **myitlab2010** and **resources** folders exist, the required DLLs and content-specific resource files are present, and that these files are all the most current. If any of these conditions are not met, the simulation will send a request up to the server and start a download of all files needed to launch the simulation. The more files that must be downloaded, the longer the launch time will be. The downloaded files are packed into CAB files and then extracted locally to minimize the size of the download. Even so, there still may be a significant delay if all or many of these files need to be downloaded. Note that when a student launches an exam or training, question-specific XML data files and MP3 audio files used for training are downloaded regardless of which files already exist in the myitlab\resources folder.

For each Office application, there is a main DLL (for example, word14.dll and excel14.dll) and subordinate DLLs (for example, WordDB017_14.dll and ExcelDB025_14.dll). The main application DLLs can be significant in size. Word14.dll and powerpoint14.dll are each over 50MB. They compress down to about 5MB each.

*If all of the required files are up-to-date and already exist in the **myitlab2010** and **resources** folders, the simulation will not download them again.* Note that each time a student launches an exam, the audio and data files for each question are downloaded.

Lab Deployment Optimal Configuration

The best way to minimize the number of files downloaded and the simulation launch time is use Pearson's myitlab Simulation Download site (<http://myitlab.pearsoncmg.com>) to manually download all of the latest simulation and content files needed to finalize your image. The site provides access to all of the files that need to exist in the **myitlab2010** folder before the student launches a myitlab sim activity from any lab computer. Alternately, you can use the installation wizard to automatically download the files.

Manually Downloading Required myitlab Simulation Files

The recommended procedure is for lab administrators to use Pearson's myitlab Simulation File Download site to obtain the myitlab-specific install components. The myitlab Simulation File Download site, available at <http://myitlab.pearsoncmg.com>, provides lab administrators access to the ActiveX, sim DLLs, and content files needed as part of the master image.

Refer to the previous table for the exact folder locations noted in the following procedure.

- 1) Go to <http://myitlab.pearsoncmg.com/>.
- 2) Download the ActiveX control using **setup.exe**. This installs stub.ocx in C:\WINDOWS\system32.
- 3) Download **sim_dlls_v53.zip** into the **myitlab2010** folder and unzip the file so that all of the files are extracted directly into the **myitlab** folder with no subfolders.
- 4) Delete **sim_dlls_v53.zip**.
- 5) If you are unsure of which book series your school is using complete this step. If you know which book series your school is using, go to the next step: **(It is highly recommended that all cabs be extracted and this step is followed for all users.)**
 - a. Download the following files into the **myitlab2010\resources** folder and unzip the file so that all of the files are extracted directly into the **myitlab2010\resources** folder with no subfolders:
 - **question_cabs_2010_v53_1.zip** (Critical File! Includes all Word and PowerPoint Volume 1 content)
 - **question_cabs_2010_v53_2.zip** (Critical File! Includes all Access and Excel Volume 1 content)
 - **question_cabs_2010_v53_3.zip**
 - **question_cabs_2010_v53_4.zip**
 - b. Delete the following files:
 - **question_cabs_2010_v53_1.zip**
 - **question_cabs_2010_v53_2.zip**
 - **question_cabs_2010_v53_3.zip**
 - **question_cabs_2010_v53_4.zip**
- 6) If you know which book series your school is using: **(This is not the recommended option.)**
 - a. Select the series, download the appropriate ZIP files into the **myitlab2010\resources** folder, and unzip the file so that all of the files are extracted directly into the **myitlab2010\resources** folder with no subfolders.
 - b. Delete the downloaded ZIP files.
- 7) Verify that all users have at least modify privileges for the **myitlab2010** folder
- 8) Verify that none of the files in the **myitlab2010\resources** folder are set to read-only.

After you complete the file download, the computer will be set up to optimally launch a simulation activity for any user.

***To verify all settings are correct launch homediagnostic.exe. Located at: <http://myitlab.com/hdt.asp>

Deep Freeze Considerations

Users of Deep Freeze (or a similar program) should verify all required files are in place prior to “freezing” the computer (refer to the table on page 1). You may also consider the following:

- 1) Specifying the **myitlab2010** folder as a “thawed” folder so that all changes made to this folder are maintained from login to login. This is ideal because when new myitlab files are published, the first person will download them and everyone else can use the new files. There is also no need to reimage Deep Freeze for myitlab going forward. For more details, see: http://www.faronics.com/whitepapers/DF_RetainUserData.pdf
- 2) Reimage the Deep Freeze master image to include the new files in whatever folders make the most sense for local deployment.

Firewall Settings

myitlab communicates via the HTTP protocol via Port 80, so workstations that are accessing myitlab must be able to communicate via this port. Please make sure that any and all firewalls used by your school's network allow myitlab to access the full domain names and IP addresses listed below. It also is recommended that your IT/Network team raise the priority of the myitlab IP address on the network.

Name: myitlab.pearsoned.com
Address: 209.202.161.240

Name: myitlab.pearsoncmg.com
Address: 209.202.161.246

Name: login.pearsoncmg.com
Address: 209.202.161.140

Name: register.pearsoncmg.com
Address: 209.202.161.139

Name: media.pearsoncmg.com
Address: 209.202.161.170

Other firewall settings that may be appropriate to consider for your computer lab:

Allow iexplore.exe access to *.pearsoned.com (or myitlab.pearsoned.com or the myitlab IP address, 209.202.161.240, depending on your firewall)

Allow TAIT30.exe access to *.pearsoned.com (or myitlab.pearsoned.com or the myitlab IP address 209.202.161.240, depending on your firewall)

Also note that some firewalls may restrict the type of files downloaded from the Internet. Filters preventing the following types of files from downloading should be removed:

- .cab
- .mp3
- .xml

Proxy Server Settings

If your network is using a proxy server, you will also have to ensure that server has the appropriate permissions. Ask your network administrator to clear the cache on the proxy server, and allow the server to download the appropriate files types for your course.

To determine if you are using a Proxy server, follow the directions provided for Internet Explore 6 and 7:

1. From the browser **Tools** menu, click **Internet Options**.
2. On the **Connections** tab, click **LAN Settings**.
3. Select **Delete all offline content**, and click **OK**.
4. In the Local Area Network (LAN) Settings window you can see if any Proxy servers are listed.

Browser Cache after Updates

Some portions of myitlab use your browser cache to store application-related JavaScript files, which support specific application functionality. Occasionally, after an application update you may experience usability issues because the files stored in your browser cache are out of date. For example, when you click on a link from a page, nothing happens or an error is displayed. This is because your web browser has cached (stored) the page on your hard drive and rather than going over the network to load the page, it has loaded the cached copy. Therefore, we recommend that if your course begins to exhibit unexpected behavior you should clear your browser cache to see if that resolves the

To delete all of the files currently stored in your browser cache, follow the directions provided for your specific browser.

Browser	Instructions
Internet Explorer 7.x, 8.x, & 9.x	<ol style="list-style-type: none">1. From the browser Tools menu, click Internet Options.2. On the General tab, in the Browsing history section, click Delete.3. In the Temporary Internet Files section, click Delete files.4. To confirm the deletion, click Yes.

Other Key Considerations

- 1) Make sure the latest myitlab ActiveX control is installed on all machines (and on the Deep Freeze image if used).
- 2) If possible, have the IT/Network people raise the priority of the myitlab IP addresses. The main myitlab IP address is 209.202.161.240. This will increase overall performance of myitlab. You also should raise the priority on several other IP addresses that myitlab uses (listed within the **Firewall Settings** section above).
- 3) If possible, set the browser to check for newer versions of stored pages automatically instead of on every visit to the page. In IE7 & IE8, this is found under Tools, Internet Options, Setting button under Browsing History. myitlab does a lot of caching and this will help overall performance.
- 4) Add *.pearsoned.com, *.pearsoncmg.com, and *.myitlab.com to **Internet Explorer Trusted Sites**. This is best implemented through Active Directory Group Policy.
- 5) Disable pop-up blocker for Trusted Sites. If a **third-party pop-up blocker** is installed, either add myitlab.pearsoned.com as an allowed site or disable the pop-up blocker while using myitlab.
- 6) For Vista and Windows 7 IE7, IE8, and IE9 users, make sure that **Protected Mode** is NOT enabled for Trusted sites. Note that Protected Mode is turned off for Trusted zone by default. Any websites that are added to the Trusted zone will also be excluded from Protected Mode when Protected Mode is not enabled for Trusted sites.

***To verify all settings are correct launch homediagnostic.exe. Located at: <http://myitlab.com/hdt.asp>

Deployment Checklist

The following steps are the best way to ensure optimal myitlab performance. Refer to the table on page 1 for the location of the folder or file:

- 1) Log in as a student on one of the machines in the lab.

- 2) Check **myitlab2010** folder.
 - Be sure the expected myitlab DLL files are there.
 - Verify users have at least modify privileges for the folder; and all files within the folder are *not* set to read-only

- 3) Check the **resources** subfolder. Be sure the expected myitlab resource files are there; and all files within the folder are *not* set to read-only

- 4) Verify **Enlite 2.x Simulation Engine Installer** is installed and is the latest version (2.9.8.x).

- 5) Make sure all popup blockers are turned off or popups are allowed for myitlab.pearsoned.com. Be sure all popup blockers are set correctly (including toolbar blockers like Google or Yahoo).

- 6) Have a myitlab instructor launch a myitlab simulation exam. It should not take more than one minute to launch. Typically, launches on a properly configured machine will take 15-30 seconds.

- 7) Relaunch the same activity a second time. If the second launch is significantly faster than the first, then the sim engine is most likely downloading more files on the first launch. Ideally, both launches should be in the 15-30 second range.