



Citrix Setup Guide

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1. CLP Citrix Access Requirements

1.1. Intel Workstation Requirements

The computers to be used for the class, including those at any remote locations must meet the following requirements:

- Minimum of 256 MB of memory
- Windows XP, Vista or Seven (32-bit or 64-bits edition)
- Internet Explorer 6 through 9 or Firefox 1.x through 5.x¹
(even though 64-bits browsers can work, we recommend you to use the 32-bits editions)
- 128-bit encryption
- Citrix Receiver (see Installing Citrix)
- Access to Internet

Open your browser and enter <https://elabgateway.moppssc.com> in the **Address** bar. If you can access the website, then you have Internet access. Otherwise you will need to contact your local network support for assistance.

1.2. Classroom Network Requirements

The rooms where the class will be taught, including every remote student's location, must meet the following requirements:

- Each student will require a minimum of 30 kbps dedicated internet bandwidth.
- A web browser connection to <https://elabgateway.moppssc.com> on port 443 (https).
- Proxy rules that permit Citrix Receiver access to elabgateway.moppssc.com using ICA/SSL packets.

¹ Higher versions of Firefox may work successfully but they are not officially supported by Citrix

1.3. Incompatible Network Configurations

The following network configurations will not work with CLP Citrix Access:

- Dialup connections.
- Proxy Automatic Configuration (PAC) scripts loaded on the local machine (using **file://** under **Use automatic configuration script** in Internet Explorer's **Local Area Network (LAN) Settings**). Use a PAC script on a web server (using **http://**) instead.
- Web Proxy Auto Discovery (WPAD) only configurations. Contact your location's network administrator about alternative configurations.

1.4. Unsupported Configurations

The following configurations may or may not work with CLP Citrix Access, but are unsupported by CLP:

- Citrix Receivers under the following operating systems:
 - Linux
 - UNIX
 - Macintosh

Though it is not supported by CLP here are the requirements given by Citrix.

For a Linux workstation the requirements are:

- Linux kernel version 2.6.29 or above, with glibc 2.7 or above, gtk 2.12.0 or above, libcap1 or libcap2 and udev support

You can find more information on:

<http://support.citrix.com/proddocs/topic/receiver/receivers-linux-wrapper.html>

For a Macintosh computer the requirements are:

- Mac OS X 10.6 or Mac OS X 10.7, 32-bit or 64-bit
- Intel-based processor
- Safari Version 5.x or later
- Mozilla Firefox Versions 3.x through 5.x

You can find more information on:

<http://support.citrix.com/proddocs/topic/receiver/receivers-mac-wrapper.html>

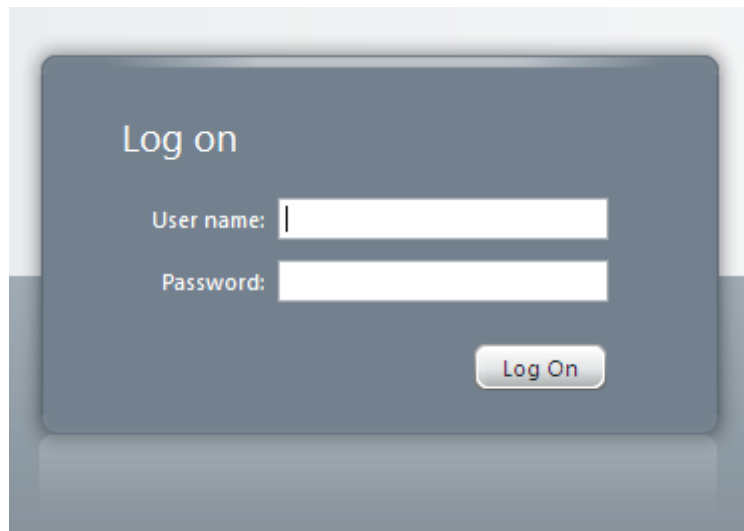
2. Setting Up For a Remote Class

2.1. Installing Citrix Online Plug-in 12.3

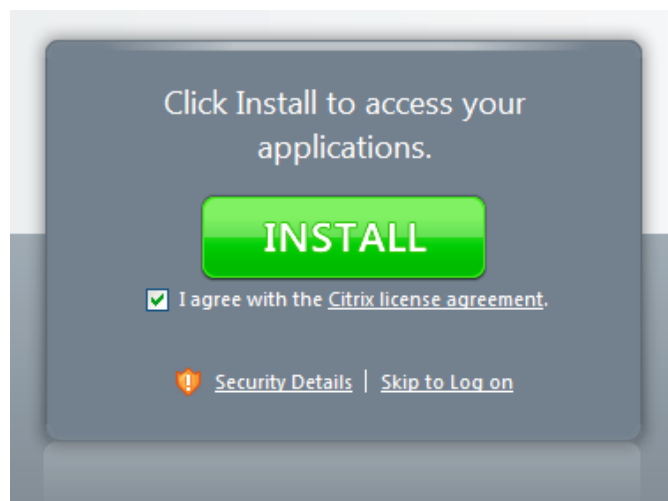
A Citrix Online Plug-in must be installed on each computer that will be used for CLP Citrix Access. For most locations, no configuration is necessary. However, if you receive error messages, you may need to consult paragraph Testing Your Configuration.

2.1.1. Installing Windows Citrix Online Plug-in

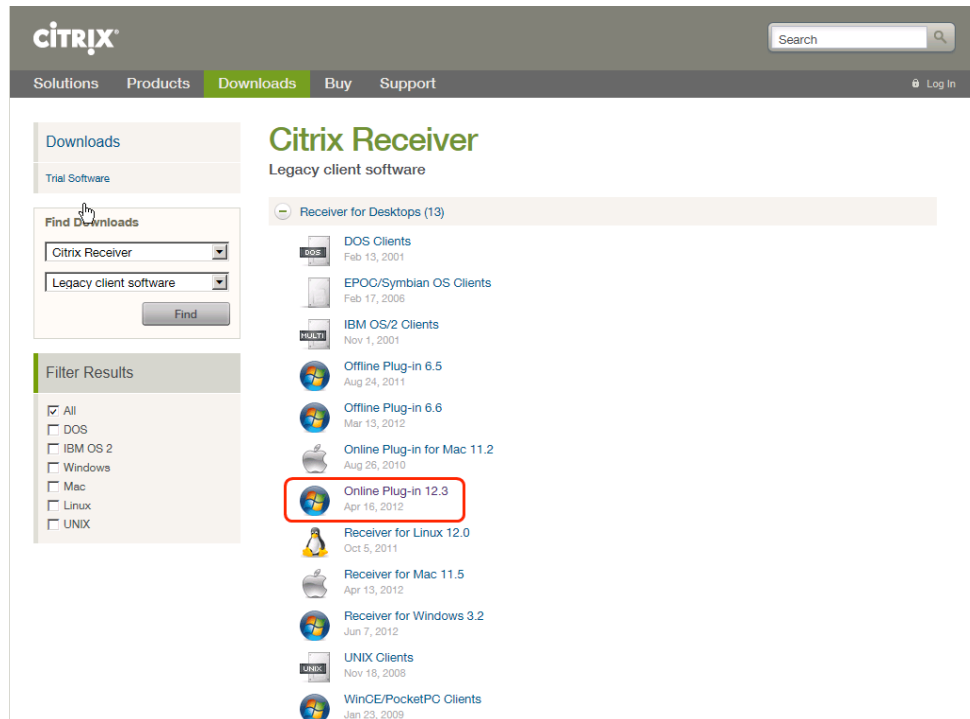
1. Open a browser (Microsoft Internet Explorer or Firefox, see paragraph 1.4) and connect to <https://elabgateway.moppssc.com>
2. Log on with the userid "elab" and password "passw0rd" (with a zero).



3. If the system invites you to install a plug-in, check the Citrix Licence Agreement box and click Install otherwise your web browser is ready



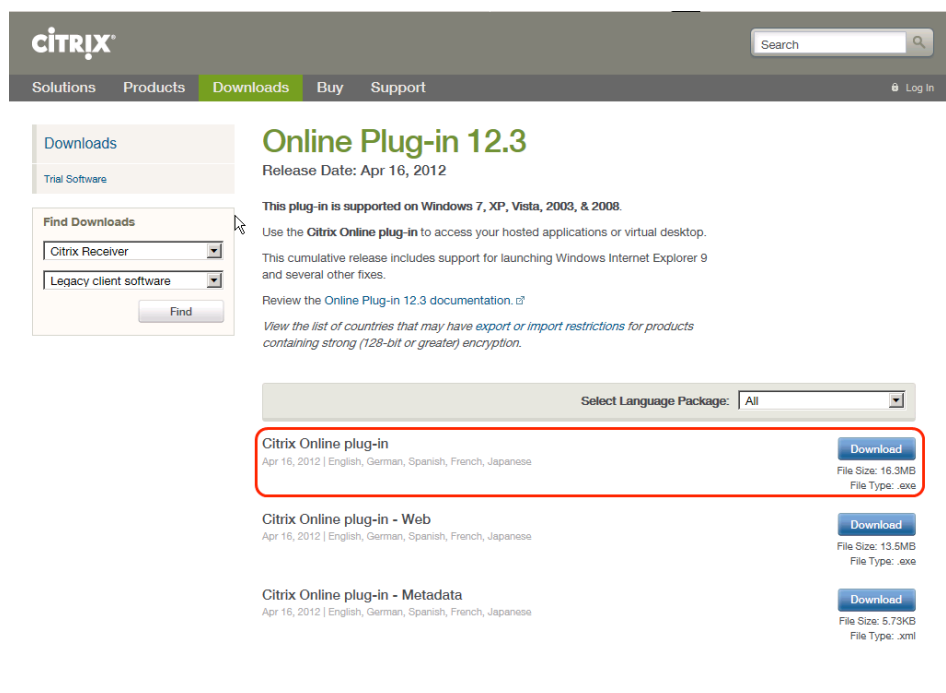
4. Select "Online plug-in 12.3".



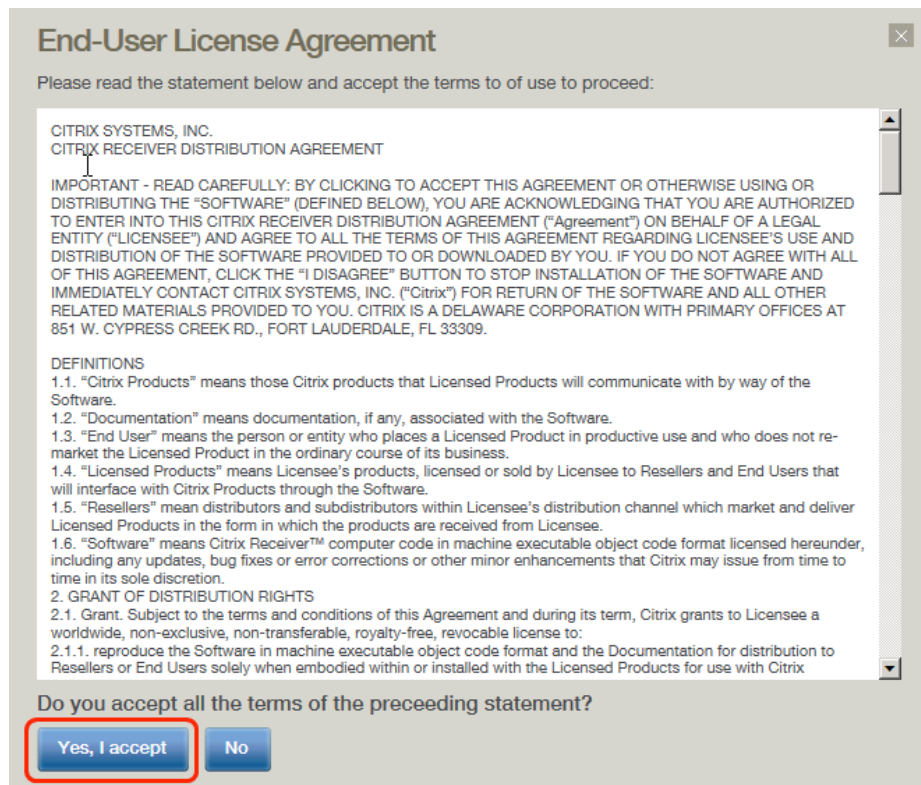
If you can't see correctly this web page, copy/paste the link below in your web browser

<http://www.citrix.com/downloads/citrix-receiver/legacy-client-software.html>

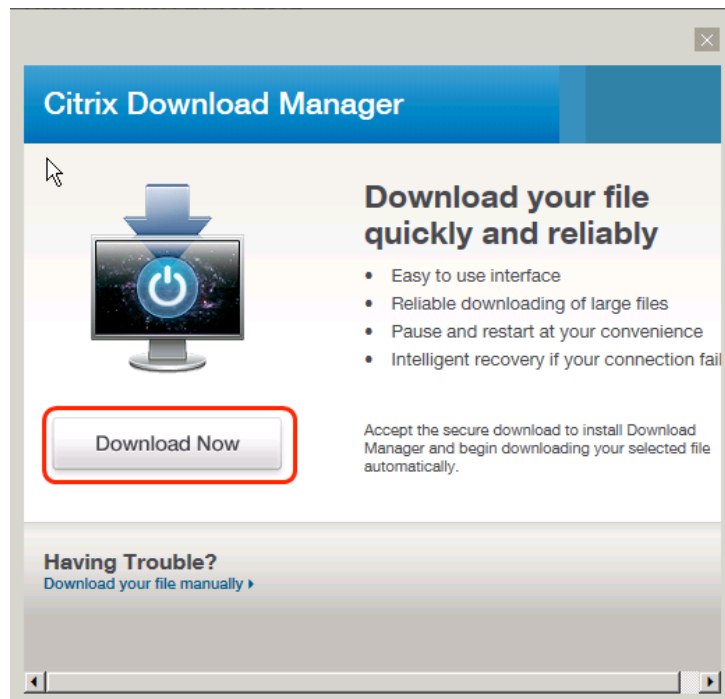
5. Select "Download" Citrix Online plug-in.



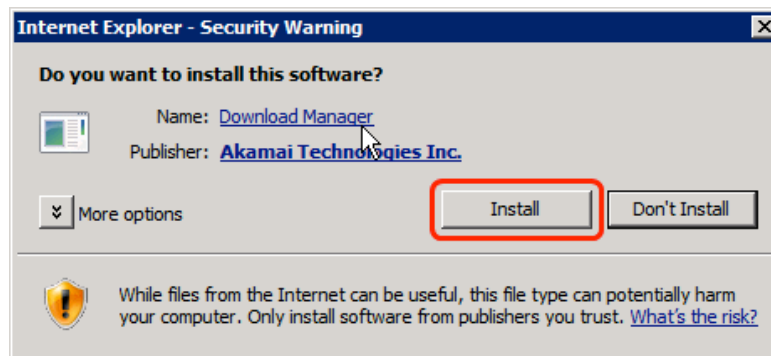
6. Accept License Agreement.



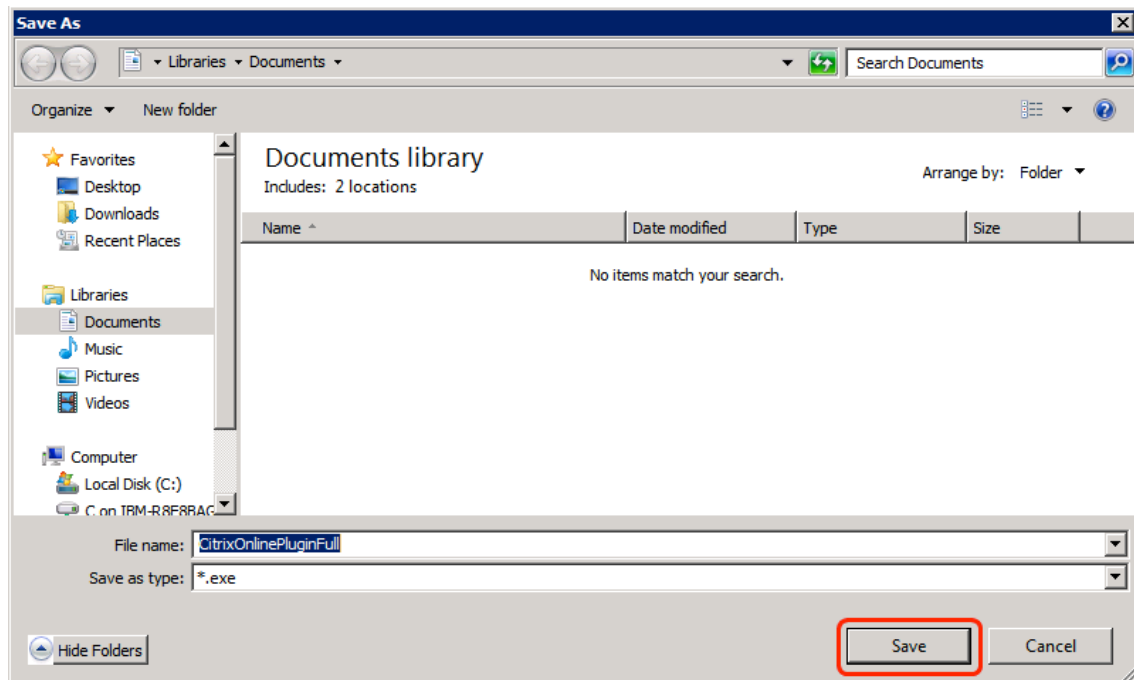
7. Select "Download Now".



8. Select "Install".

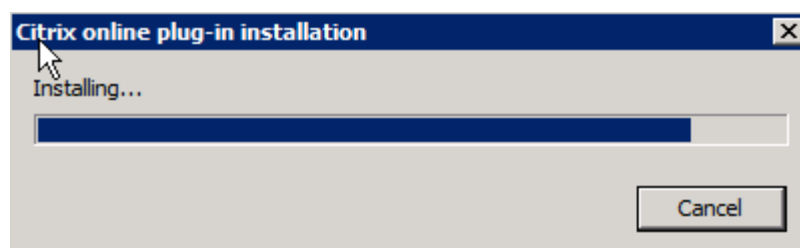


9. Choose to save the file in "My Documents" folder.

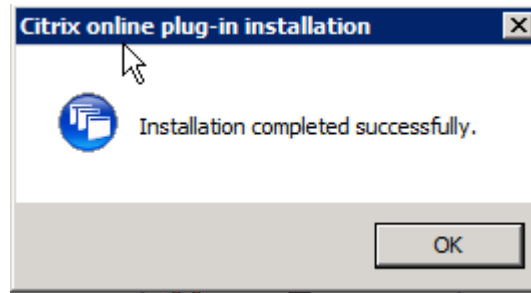


10. At the end of the download, open "my documents" folder and launch the setup program you have just saved.

11. Wait for the end of the plugin installation

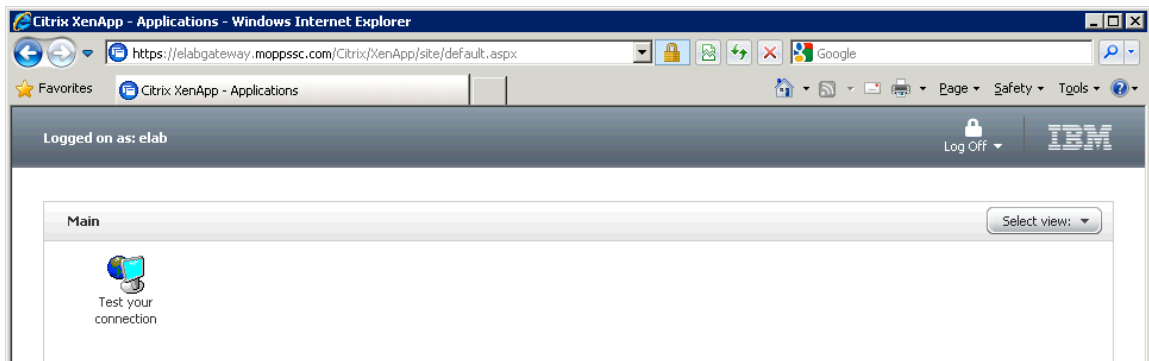


12. As soon as the setup is complete press OK.



13. Go back to your web browser. You may have to accept Citrix Helper Control Active X execution. Click on "This website wants to run the following add-on: 'Citrix Helper Control' from...", and "Run ActiveX Control".

14. The Citrix Online Plug-in is installed.



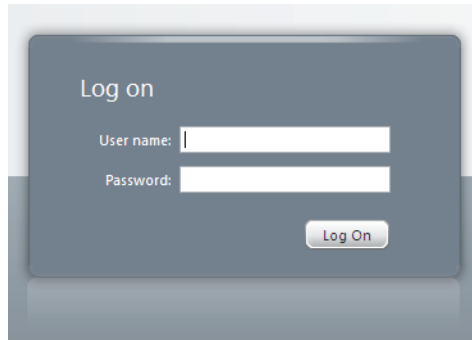
2.2. Testing Your Configuration

Please run this test before class begins so that problems can be detected and corrected before students arrive. This test must be run at each location where a student will be working, including separate classrooms and remote locations.

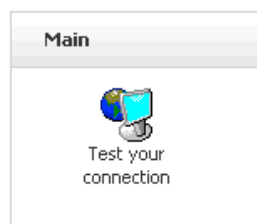
2.2.1. Regular Connectivity Test

1. Open your browser.
2. Enter <https://elabgateway.moppssc.com> in the Address field and press Enter.
3. You should see a logon screen.

4. Enter the userid "elab" and the password "passw0rd" (with a zero).

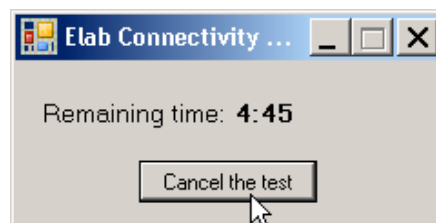


5. Click the TEST YOUR CONNECTION icon.

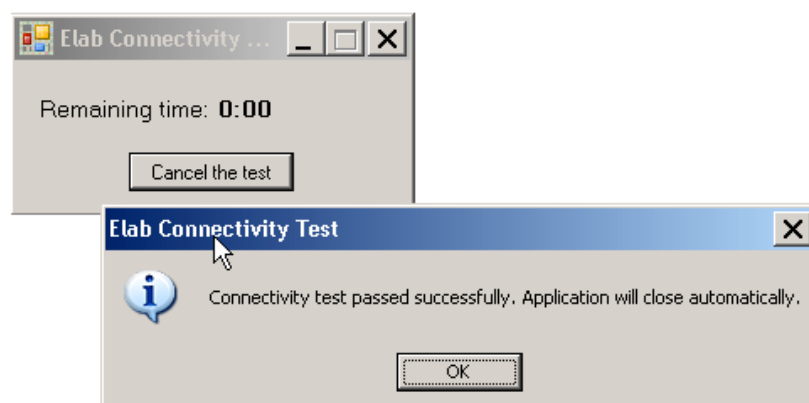


6. A Citrix window appears: "Citrix Receiver connecting".

7. In a moment, a countdown timer appears.



8. If the message stays running for approximately 5 minutes, click the ok button to close the message. You have successfully completed the regular connectivity test and you do not need to do any further testing.

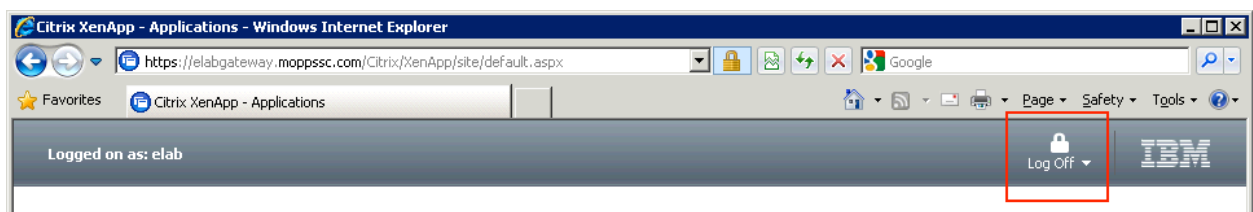


9. If the window disappears, you may have a firewall timeout on your network. Run the test again and if it disappears after being connected for the same amount of time as before, there is a timeout set on your firewall. You will need to contact your network administrator to enable longer connections; otherwise students will be regularly disconnected.
10. If you receive any errors, see Network configuration or Troubleshooting.

2.3. Connect to the lab environment

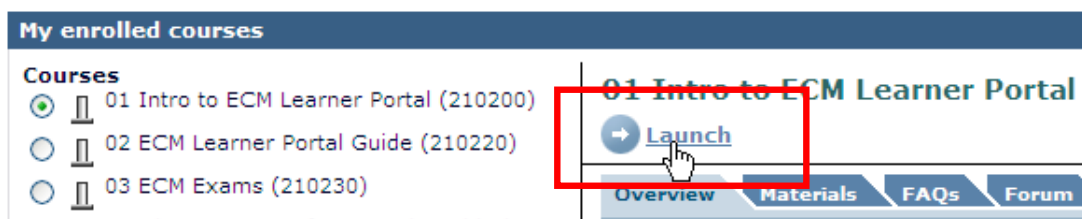
Once the test is successful, you can connect to your lab environment.

If you are still connected to <https://elabgateway.moppssc.com> with the elab user id, you have to logoff first: click on "Log Off" link.



Then reconnect:

- For ILT (Instructor Led Training) or ILO (Instructor Led Online) Class delivery: using the information given by your Teacher
- For eLod classes: using the Learner portal instructions or Web Link



2.4. Network Configuration

Errors generally result from a firewall or proxy not configured to permit traffic ICA/SSL traffic through it. If you receive an error, we recommend running the "Testing your configuration" below and then "Collecting your location's firewall configuration".

2.4.1. Application Level Proxies

If your location is using application level proxies, you will need to contact your location's network administrator to permit the Citrix Receiver to connect to `elabgateway.moppssc.com`.

2.4.2. Personal Firewalls

Personal firewalls (such as Zone Labs Integrity Desktop and Norton Personal Firewall) can permit or block traffic based on the application and/or port. Make sure that any personal firewall is configured to permit the Citrix Receiver (`%ProgramFiles%\Citrix\icaweb32\wfica32.exe` for the web client and `%ProgramFiles%\Citrix\ICA Client\wfica32.exe` for the full package) access to the internet using port 443 (https).

2.4.3. How Citrix Works

When you click on an icon in the CLP Citrix application page, Internet Explorer downloads a small configuration file (the ICA file). Windows loads Citrix Receiver with that file and then tries to connect to the application specified in the ICA file on `elabgateway.moppssc.com` via ICA/SSL (port 443) using the network configuration read from both your browser and the ICA file. The Citrix server `elabgateway.moppssc.com` starts the application on one of the machines in the cluster (the host) and then acts as an encrypted SOCKS proxy between the Citrix Receiver (or the proxy server for your location's network) and the host.

2.4.4. Collecting Your Location's Firewall Configuration

Before contacting the Help Desk, we recommend collecting your location's firewall configuration in order to have the information ready when the Techs ask how your network is configured.

1. On a computer with a working Internet connection, open up Internet Explorer.
2. Select **Tools** on the menu bar and then select **Internet Options...** in the menu.
3. Click the **Connections** tab.
4. Click the **LAN Settings...** button.
5. If only "Automatically detect" settings is checked, you are using Web Proxy Auto Discovery (WPAD). WPAD is not a compatible configuration. Contact your location's network administrator about alternative configurations.

6. If the Use configuration script check box is checked, you are using a Proxy Automatic Configuration (PAC) script. Note the entry in the Address box. If the address is a local file (it begins with file://), eLabs will not work. Contact your location's network administrator about using a server based PAC script (one that begins with an http:// address.) or a different configuration.
7. If the **Use a proxy server** for your LAN check box is checked, you are using one of a variety of proxy configurations:
 - i. If the **Address** and **Port** fields are filled in, you are using a single proxy. Note the contents of those two fields.
 - ii. If those fields are not checked, click the **Advanced...** button.
 - iii. If only the **Socks** field and **Port** is filled in, you are using a SOCKS proxying. Note the contents of those two fields.
 - iv. If several of the fields are filled in, you are using multiple proxies. Note what is in each field and the associated port.
8. If nothing is checked, you are using Transparent Proxying.

2.4.5. Basic Connectivity Test

For locations using destination or traffic proxies, you can test the basic connectivity of your network using telnet should the regular connectivity test fail. (This test may not work for sites using application level proxies.) If you have problems with connecting to CLP Citrix server, you should run this test.

1. Open a command prompt.
2. Enter **telnet elabgateway.moppssc.com 443** and press Enter.²
3. The message **Connecting To elabgateway.moppssc.com...** should flash on the screen and then the screen should go blank. If you press a key, you will be returned to the command prompt.
4. Type **exit** and press Enter to close the command prompt.

If you receive the message **Connecting To elabgateway.moppssc.com...Could not open connection to the host, on port 443: Connect failed**, your firewall is blocking access to CLP Citrix servers or your location is using application level proxies.

² Telnet client is not installed by default on Windows Seven

2.5. Fixing Common Network Error Messages

- **SSLRelay Error 40**

This error indicates that the Citrix Receiver cannot connect to elabgateway.moppssc.com. There are two reasons why you will receive this error message. The first is that Citrix Receiver cannot resolve the full qualified domain name (FQDN). Verify that the computer has the right network configuration for your location. If that does not fix the problem, then open the hosts file (%windir%\hosts for Windows 98 & Me and %windir%\system32\drivers\etc\hosts for Windows NT 4.0, 2000, XP, & 2003) in Notepad and add the following line to the end of the file:

```
129.35.161.40    elabgateway.moppssc.com
```

Note that the line should contain the IP address, followed by any amount of white space (tabs or spaces), and then the FQDN. Save the file and try to connect to the application again.

The second reason is that Citrix Receiver detected the network configuration incorrectly and the Citrix Receiver is trying to use elabgateway.moppssc.com as the proxy for your network. Contact the Help Desk for information on overriding the Citrix Receiver's proxy configuration. Please collect your location's firewall configuration before calling.

- **SSL Error 4**

Your location's network may be using application-level proxies. Run the "Testing your configuration". If it fails, contact your location's network administrator to permit ICA/SSL traffic through the firewall. If it passes, contact the Help Desk.

- **The Citrix SSL server you selected is not accepting connections.**

A firewall is blocking the Citrix Receiver from reaching elabgateway.moppssc.com. Verify that any personal firewall is properly configured (see Personal Firewalls). If configuring a personal firewall does not correct the problem or there is no personal firewall installed, then contact your location's network administrator.

3. Hints and Tips

- Enabling mouse pointer shadows in virtual machines will cause double cursors and make the mouse less responsive.
- In Windows XP virtual machines, leaving the system set to **Adjust for best performance** (right-click on **My Computer**, select **Properties**, select the **Advanced** tab, click **Settings** in the **Performance** box, and click **OK** back to the desktop) will improve performance.

4. Troubleshooting

Problem	Solution
Clicking on icon results in message Open, Save or cancel Launch.ica	Uninstall Citrix Receiver, reboot your system and reinstall Citrix Receiver
	Internet Explorer must be set as the default web browser.
Clicking on icon results in message No ICA file found	Right-click on Virtual PC icon and select Save-As . Save Launch.ica to desktop and then open Launch.ica (double click).
Clicking on icon results in message SSL Route not found	Make sure that Internet Explorer is set as the Default Browser.
Clicking on icon results in message SSL Error 4.	See "Testing Your Configuration". If those instructions do not help, contact the Help Desk.
Clicking on icon results in message SSLRelay Error 40.	
Clicking on icon results in message The Citrix SSL server you selected is not accepting connections.	
Clicking on icon results in message SSL Error 5.	Contact the Help Desk.
After clicking the icon, Citrix will connect and a window but disappears immediately.	
Application limit reached error	
All servers are down error appears.	
Your administrator has disabled this application error appears.	Refresh the web page and try again. If the icon disappears and you need access to it, contact the Help Desk.
User is suddenly disconnected.	Another user is using the same username and connected to the same session. Verify that each student is using a unique username.
	Verify local internet access.
Virtual machine loads in read-only mode or refuses to load.	Two users are trying to access the same student account at the same time. Students should each use their own separate user IDs.

<i>Problem</i>	<i>Solution</i>
	A student got disconnected and the old session has not expired. Contact the Help Desk to reset the ID.
Numbers are appearing instead of letters when typing.	Num Lock is on. Toggle the Num Lock key.
Virtual machine is sluggish.	See Hints and Tips for ways to improve performance.
Double cursors.	
Mouse is sluggish.	