RLP CITRIX Setup Guide


IBM Remote Lab Platform

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**February 2016 Edition – Version2.3**

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# IBM Remote Lab Platform

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Preface

Please read the instructions carefully on how to test your connectivity to the class environment.
1 **RLP 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:

- Windows Vista, Windows 7 or Windows 8.x (32-bit or 64-bit edition)
- Internet Explorer 7 through 10 or Firefox 18.x (minimum supported version)
  (64-bits browsers will work, however we recommend you use the 32-bit editions)
- 128-bit encryption (TLS encryption enabled)
- Citrix Receiver (see [Installing Citrix Receiver](#))
- Access to Internet

Open your browser and in the address bar, enter:

https://pokctx.edu.ihost.com

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://pokctx.edu.ihost.com on port 443 (https).
- Proxy rules that permit Citrix Receiver access to pokctx.edu.ihost.com using ICA/SSL packets.

1.3 **Incompatible Network Configurations**

The following network configurations will not work with RLP 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 RLP Citrix Access, but are unsupported by RLP:

• Citrix Receivers under the following operating systems:
  • LINUX
  • UNIX
  • Macintosh
  • Microsoft Windows XP (support ended April 8, 2014)

Though it is not supported by RLP 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 here:
  http://support.citrix.com/proddocs/topic/receiver/receivers-mac-wrapper.html
2 Setting up for a Remote Class in Poughkeepsie

2.1 - Installing Citrix Receiver

A Citrix Online Plug-in must be installed on each computer that will be used for RLP 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 Receiver

1. Open a browser and connect to http://receiver.citrix.com/
2. Then Follow the instructions to install the Citrix receiver.

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 for Poughkeepsie

1. Open your browser
2. Enter https://pokctx.edu.ihost.com in the address field
3. You should see a logon screen
4. Enter the user name “poklabtest” and password “Connt3st”
5. Click the Poughkeepsie IRLP Lab Testing icon


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.

2.2.2 - Connect to the lab environment

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

If you are still connected to https://pokctx.edu.ihost.com with the poklabtest user id, you have to logoff first: click on “Log Off” link.

Then reconnect:
3 Network Configuration

Errors generally result from a firewall or proxy not configured to permit 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”.

3.1 - 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 pokctx.edu.ihost.com.

Recommendation about proxy:

With local administrator credentials:

Launch gpedit.msc (Group Policy console)

Right click Computer Configuration / Administrative Templates Select Add/Remove Templates....

Click Add...

Look in : C:\Program Files\Citrix\ICA Client\Configuration Select icaclient.adm and click Open

Click Close

Back to Group Policy console

Select Computer Configuration / Administrative Templates / Citrix Components / Citrix Receiver / Network routing / Proxy

Double-click Configure client proxy

Select Enabled and Auto as Proxy types

This setting should force the Citrix Receiver to use the local machine settings to determine which proxy server to use for connection.

3.2 - 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).

### 3.3 - How Citrix Works

When you click on an icon in the RLP Citrix application page, the browser 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 pokctx.edu.ihost.com via ICA/SSL (port 443) using the network configuration read from both your browser and the ICA file. The Citrix server pokctx.edu.ihost.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.

### 3.4 - 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://), IRLP labs 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 are filled in, you are using a SOCKS proxy. 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.

3.5 - 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 RLP Citrix server, you should run this test.

1. Open a command prompt.
2. Enter `telnet pokctx.edu.ihost.com 443` and press Enter.
3. The message:

   Connecting To pokctx.edu.ihost.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 pokctx.edu.ihost.com
   Could not open connection to the host, on port 443: Connect failed

   Your firewall is blocking access to RLP Citrix servers or your location is using application level proxies.

3.6 - Fixing Common Network Error Messages

- SSL Relay Error 40

   This error indicates that the Citrix Receiver cannot connect to pokctx.edu.ihost.com. There are two reasons why you will receive this error message. The first is that Citrix Receiver cannot resolve the fully 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:

   129.33.140.248 pokctx.edu.ihost.com

   Telnet client is not installed by default on Windows 7
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 pokctx.edu.ihost.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 pokctx.edu.ihost.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.

### 4 Troubleshooting

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<tr>
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<th>Solution</th>
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| 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. |
<p>| 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. | |</p>
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<th>Resolution</th>
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<td>Clicking on icon results in message The Citrix SSL server you selected is not accepting connections.</td>
<td>See “Testing Your Configuration”. If those instructions do not help, contact the Help Desk.</td>
</tr>
<tr>
<td>Clicking on icon results in message SSL Error 5.</td>
<td>Contact the Help Desk.</td>
</tr>
<tr>
<td>After clicking the icon, Citrix will connect and a window but disappears immediately.</td>
<td>See “Testing Your Configuration”.</td>
</tr>
<tr>
<td>Application limit reached error</td>
<td>Contact the Help Desk.</td>
</tr>
<tr>
<td>All servers are down error appears.</td>
<td>See “Testing Your Configuration”.</td>
</tr>
<tr>
<td>Your administrator has disabled this application error appears.</td>
<td>Refresh the web page and try again. If the icon disappears and you need access to it, contact the Help Desk.</td>
</tr>
<tr>
<td>User is suddenly disconnected.</td>
<td>Another user is using the same username and connected to the same session. Verify that each student is using a unique username.</td>
</tr>
<tr>
<td>Verify local internet access.</td>
<td>See Hints and Tips for ways to improve performance.</td>
</tr>
<tr>
<td>Virtual machine loads in read-only mode or refuses to load.</td>
<td>Two users are trying to access the same student account at the same time. Students should each use their own separate user IDs.</td>
</tr>
<tr>
<td></td>
<td>A student got disconnected and the old session has not expired. Contact the Help Desk to reset the ID.</td>
</tr>
<tr>
<td>Numbers are appearing instead of letters when typing.</td>
<td>Num Lock is on. Toggle the Num Lock key.</td>
</tr>
<tr>
<td>Virtual machine is sluggish.</td>
<td>See Hints and Tips for ways to improve performance.</td>
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