



January 2022



**IMPORTANT:** Please note changes regarding supported Browsers, hardware requirements, as well as important changes to the IP addresses being used by the LMS content distribution network. The following outlines the minimum technical requirements for ABA eLearning LMS and AB courseware. To ensure successful usage of ABA training resources, a review of these require by your internal or contracted IT staff is required.

Additionally, please review the ABA LMS Registration Access Agreement found [here](#).

### End User Requirements

<b>Hardware</b>	<ul style="list-style-type: none"> <li>○ Windows Compatible Personal Computer (Thin clients are NOT supported. Thin client configurations provide only a graphical user interface at the terminal and functions of the operating system are supplied by a remote server that shares resources across many users).</li> <li>○ 900 MHZ or faster processor ○ 512 MB of RAM or greater</li> <li>○ 1024x768 recommended, at 16-bit(high color) or greater</li> <li>○ Speakers or headphones for courses containing audio or video components</li> </ul>
<b>Browsers</b>	<ul style="list-style-type: none"> <li>○ <b>Firefox 55+, Chrome 60+, &amp; Microsoft Edge</b></li> <li>○ Browser security must be set to allow script-initiated windows without size or position constraints.</li> <li>○ Browser must be set to accept cookies</li> <li>○ Javascript must be enabled</li> <li>○ All pop-up blockers must be disabled while using ABA eLearning (browser, plugin, toolbar, and security driven pop-up blockers).</li> </ul>
<b>Virtual Schools</b>	<p>NOTE for participation in ABA Virtual Schools access to Zoom is REQUIRED. Please consult the Zoom support guidelines here:  <a href="https://support.zoom.us/hc/en-us/articles/201362023-System-requirements-for-Windows-macOS-and-Linux">https://support.zoom.us/hc/en-us/articles/201362023-System-requirements-for-Windows-macOS-and-Linux</a></p>

#### Special Requirements for:

**Users Accessing Live ABA Webinars:** ABA Webinars are provided via the LMS using the Intrado Platform. Users can check for readiness for the live webinar by clicking on this link:  
<https://presentations.akamaized.net/ProductResources/Production/HTML/ConnectivityTroubleshooting/ConnectivityTroubleshooting.html#STUDIO>

**Users Accessing from Personally Owned/Non-corporate computers or Non-corporate network locations:** Users taking courses from personal computing locations on personal computers (non corporate/non-corporate network machines or network connections) should ensure that personal firewalls and/or certain security products are set to exclude [aba.com](#), [csod.com](#) and [cornerstoneondemand.com](#). In some cases disabling these products may be necessary to use ABA eLearning products.

## Network Level Requirements

<b>Email Filtering Systems</b>	<p>Please add the following e-mail server IP addresses and/or domain names to your white-lists to ensure uninterrupted mail service:</p> <p><b>208.185.229.41 – 208.185.229.45</b>      <u><a href="#">csod.com</a></u>, <u><a href="#">cornerstoneondemand.com</a></u>,  <b>208.185.235.41 – 208.185.235.45</b>      <u><a href="#">mail01.response.aba.com</a></u>, &amp; <u><a href="#">aba.com</a></u>  <b>204.92.19.140</b></p>																
<b>Whitelisting: Firewalls &amp; Intrusion Detection Systems</b>	<p>Firewalls should be set to whitelist connections to <u><a href="#">aba.com</a></u>, <u><a href="#">cornerstoneondemand.com</a></u>, and <u><a href="#">csod.com</a></u> by domain name only and not by IP address.</p> <p>The following domains are used by ABA for content delivery through a content delivery network (CDN). These domains should also be whitelisted. <b>Please note, these domains use HTTPS (SSL).</b></p> <table border="1" data-bbox="284 693 1295 1024"> <tr> <td>content.aba.com</td> <td>104.37.107.34</td> </tr> <tr> <td>uploads.aba.com</td> <td>104.37.107.41</td> </tr> <tr> <td>c757448.ssl.cf2.rackcdn.com</td> <td>104.37.107.32/28</td> </tr> <tr> <td>c757448.r47.cf2.rackcdn.com</td> <td>104.37.107.34-104.37.107.36</td> </tr> <tr> <td>c757447.ssl.cf2.rackcdn.com</td> <td></td> </tr> <tr> <td>c757447.r47.cf2.rackcdn.com</td> <td></td> </tr> <tr> <td>dmhl4ur684aqh.cloudfront.net</td> <td></td> </tr> <tr> <td>http://csod-vh.akamaihd.net</td> <td></td> </tr> </table> <p>NOTE: For users of Skillsoft or Risk Management Association content, the following urls must also be whitelisted: rma-ementor.org and skillport.com</p> <p>For users of Wharton School of Business content, the following urls must also be whitelisted: whartononline.upenn.edu and whartononline.instructure.com</p> <p>If you access ABA’s LMS through abalms.csod.com due to filtering issues, please whitelist <u><a href="#">aba.abakc.com</a></u>.</p>	content.aba.com	104.37.107.34	uploads.aba.com	104.37.107.41	c757448.ssl.cf2.rackcdn.com	104.37.107.32/28	c757448.r47.cf2.rackcdn.com	104.37.107.34-104.37.107.36	c757447.ssl.cf2.rackcdn.com		c757447.r47.cf2.rackcdn.com		dmhl4ur684aqh.cloudfront.net		http://csod-vh.akamaihd.net	
content.aba.com	104.37.107.34																
uploads.aba.com	104.37.107.41																
c757448.ssl.cf2.rackcdn.com	104.37.107.32/28																
c757448.r47.cf2.rackcdn.com	104.37.107.34-104.37.107.36																
c757447.ssl.cf2.rackcdn.com																	
c757447.r47.cf2.rackcdn.com																	
dmhl4ur684aqh.cloudfront.net																	
http://csod-vh.akamaihd.net																	
<b>Bandwidth</b>	<p>ABA eLearning requires a minimum of 56kbps. ABA Courseware bandwidth requirements vary by course. <b>For optimal performance, a high speed internet connection is recommended. Students taking courses on lower bandwidth connections may experience slower load times or video buffering in the courses that contain video.</b></p>																

(Additional troubleshooting details continued on next page.) **PLEASE NOTE:** In order to troubleshoot content delivery problems, it may be necessary to enable firewall logging while reproducing the problem. Content is delivered from several IP addresses via the Akamai network. The IP addresses listed below should only be used for troubleshooting purposes.

We **do not recommend** that you whitelist all of the IP addresses. *Cornerstone Subnet:* (This is the only IP address range that is 'safe' to whitelist.) ○ 208.185.229.0/24 ○ 208.185.235.0/24

**\*\*NOTE:** If you whitelist these ranges, use <https://abalms.csod.com> to access the LMS.

*Akamai CIDR: DO NOT WHITELIST -- These are for information purposes only*

104.108.167.217/32	2.20.16.215/21	23.12.125.9/32	23.52.62.118/32	23.64.88.145/32
104.67.28.153/32	104.68.188.153/32	104.69.103.5/32	104.76.92.153/32	23.65.216.153/32
104.78.76.153/32	104.81.246.153/32	104.82.76.153/32	104.83.76.153/32	23.67.158.222/32
104.83.82.153/32	104.83.92.153/32	104.91.156.170/32	104.94.102.153/32	23.75.218.153/32
104.98.241.212/32	114.108.190.3/32	118.214.241.238/32	118.215.74.213/32	23.9.93.142/32
118.215.82.73/32	125.252.236.222/32	173.222.102.196/32	173.222.142.54/32	72.246.48.153/32
173.222.190.157/32	173.222.226.222/32	173.223.142.160/32	173.223.154.25/32	92.122.98.178/32
173.223.230.174/32	173.223.76.109/32	173.223.92.153/32	184.24.250.118/32	95.101.106.172/32
184.25.65.67/32	184.27.128.81/32	184.28.154.251/32	184.28.25.247/32	96.17.225.242/32
184.29.113.67/32	184.29.29.86/32	184.29.59.87/32	184.31.218.113/32	96.6.38.171/32
184.50.180.242/32	184.51.70.78/32	184.84.186.172/32	184.84.202.167/32	23.65.12.150/32
184.85.78.196/32	2.16.124.52/32	2.16.128.153/32	2.16.30.153/32	23.66.152.153/32
2.16.32.59/32	2.16.44.107/32	2.16.84.204/32	2.16.96.96/32	23.7.121.142/32
2.17.177.246/32	2.20.18.202/32	2.21.147.109/32	2.21.195.106/32	23.78.201.137/32
2.22.12.134/32	2.22.220.153/32	23.0.172.153/32	23.0.230.153/32	59.151.172.229/32
23.0.236.153/32	23.1.10.208/32	23.1.188.153/32	23.10.12.153/32	88.221.39.197/32
23.10.60.153/32	23.12.124.153/32	23.12.236.153/32	23.13.177.195/32	92.123.164.109/32
23.13.44.153/32	23.14.44.153/32	23.15.132.153/32	23.15.206.167/32	95.101.110.174/32
23.15.250.172/32	23.194.168.29/32	23.194.220.153/32	23.196.63.78/32	96.17.250.118/32
23.197.60.153/32	23.198.104.153/32	23.198.106.153/32	23.199.3.175/32	23.65.136.93/32
23.203.244.69/32	23.204.100.153/32	23.205.3.63/32	23.206.76.153/32	23.66.217.139/32
23.207.147.202/32	23.211.145.205/32	23.211.230.63/32	23.212.102.153/32	23.7.35.229/32
23.214.72.153/32	23.215.140.153/32	23.218.122.196/32	23.221.20.153/32	23.79.202.160/32
23.222.172.153/32	23.223.76.153/32	23.3.142.172/32	23.32.12.153/32	69.192.122.57/32
23.33.172.155/32	23.35.108.129/32	23.35.169.137/32	23.35.44.31/32	92.122.232.116/32
23.35.60.135/32	23.35.84.44/32	23.36.89.137/32	23.37.137.137/32	95.100.112.136/32
23.37.89.142/32	23.38.116.153/32	23.38.188.153/32	23.4.39.66/32	95.101.164.33/32
23.4.57.138/32	23.40.12.153/32	23.41.73.142/32	23.42.76.153/32	96.17.26.213/32
23.43.137.138/32	23.43.185.137/32	23.44.252.247/32	23.46.2.153/32	23.65.200.153/32
23.47.228.145/32	23.47.23.163/32	23.49.134.105/32	23.5.124.153/32	23.66.40.153/32
23.5.75.11/32	23.50.148.104/32	23.50.204.88/32	23.51.12.153/32	23.7.84.10/32
23.51.122.234/32	23.51.156.153/32	23.51.245.235/32	23.52.84.233/32	23.79.53.151/32
23.54.109.188/32	23.54.12.153/32	23.54.84.79/32	23.55.149.198/32	72.246.108.92/32
23.56.156.53/32	23.57.196.223/32	23.57.236.113/32	23.57.83.197/32	92.122.70.171/32
23.58.10.169/32	23.58.167.68/32	23.58.90.153/32	23.58.96.169/32	95.100.246.186/32
23.59.138.189/32	23.59.201.137/32	23.60.79.15/32	23.61.12.33/32	95.101.84.149/32
23.61.126.225/32	23.62.248.29/32	23.63.115.63/32	23.63.150.153/32	96.6.226.129/32
23.63.193.237/32	23.63.22.153/32	23.64.142.153/32	23.64.172.167/32	