



Minimum End-User System Requirements

Revision 7

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1.0 Executive Summary

1.1 Purpose of this Document

This document describes the minimum system requirements for CiNow content users. It does not describe any specific requirements for customers hosting the content themselves. It is expected that customer-friendly versions of these requirements will be developed by the appropriate parties as needed.

2.0 Minimum End-user Hardware Requirements

2.1 Operating System

Microsoft Windows XP Service Pack 3, Vista 32-bit, Vista 64-bit, Windows 7 32-bit, Windows 7 64-bit.

NOTE: Apple OS and Linux are not currently supported.

NOTE: If using the 64-bit of any operating system you will need to use a 32-bit version of IE to view Flash based courses. Adobe has not released a 64-bit version of Flash player.

2.2 Processor

For XP

Pentium III at 650 MHz or compatible (Pentium IV recommended)

For Vista and Windows 7

1 GHz processor (2 GHz recommended)



2.3 RAM

Table 1 states the minimum memory requirements as specified by Microsoft.

- Table 1: Minimum Memory Requirements (MB is Mega-Bytes; GB is Giga-Bytes)

Windows Version	128MB	256MB	512MB	1GB	2GB
Windows XP 32-bit		X	Recommended		
Windows XP 64-bit					X
Windows Vista 32-bit				X	
Windows Vista 64-bit					X
Windows 7 32-bit				X	
Windows 7 64-bit					X

2.4 Screen Resolution

1024 x 768 recommended to reduce scrolling

2.5 Color Settings

16 bit High Color (24 bit True Color recommended for video)

2.6 Audio Support

Sound card and speakers

2.7 Internet Connection Speed

Minimum 56Kbps for **non-video** courses (**higher recommended**)

Broadband speeds of 6 Mbps per second for multimedia ***playback actually measured at the PC playing the multimedia courses*** (higher strongly recommended).

Video includes Windows Media, Flash Movies, Flash Animation and any format of audio.

3.0 Minimum End-user Software Requirements

3.1 Web Browser

We support Microsoft Internet Explorer version 7 and later.



3.1.1 Web Browser Settings

JavaScript: Enabled to allow interaction between course material and browser.

Java: Enabled (see section “5.2 How to download and install JAVA Software” for details) to allow communications between the course and the LMS.

Active X: Must be enabled to allow downloading, running, and scripting for any course using Flash or Windows Media Player. See section “5.3 Configuring Internet Explorer for use with CiNow” for further details.

Flash and Windows Media Player are launched as ActiveX controls embedded within the web browser. If ActiveX is not enabled then multimedia courses will not launch properly.

3.2 Video Playback Support

Only Windows Media Player 10 series and later are supported. Windows Media Player is available for free from Microsoft. Use the following link to download the current version of Windows Media Player: <http://www.microsoft.com/windows/windowsmedia>.

Operating System	Recommended Player version
Windows 7	Windows Media Player 12
Windows Vista	Windows Media Player 11 for Windows Vista
Windows XP	Windows Media Player 11

NOTE: It is a good idea to turn on “Video Acceleration” within Windows Media Player.

Your version of “Windows Media Player” may be different. In general, to turn on “Video Acceleration” you:

1. Select “Tools” on the menu bar of “Windows Media Player”
2. Select “Options...”
 1. Select the “Performance “ tab
 2. In the “_Video Acceleration” section ove the slider to half way between “None” and “Full”

If you still experience problems with video playback then repeat the steps above and this time move the slider all to the way to “Full.”

3.3 Adobe Flash Player

Supported Flash Player versions are the Flash 8, 9 and 10 Player. The Flash Player is available for download free from Adobe; use the following link to download the current Flash Player:

<http://www.adobe.com/software/flashplayer/>



4.0 Proxy and Firewall Administration

4.1 Proxy Server Administration

The following IP addresses and/or domains must be allowed through your firewall.

209.249.56.39 209.249.56.11 209.249.56.13	www.criticalinfonet.com
209.249.56.32	cdsfetr.pwpl.com
209.249.56.31	lmsfetr.pwpl.com
209.249.56.35	cspi.criticalinfonet.com -----(needed by CSP customers)
68.142.121.57	trinilearn.wmod.llnwd.net (for streaming video content)

NOTE: If you maintain a “white list” of sites that users can access then you must add the above URL and or IP addresses to that whitelist.

4.2 Firewall Administration

The following ports must be open:

- Port 80 (WWW)
- tcp 20 (FTP-data)
- tcp 21 (FTP)
- tcp 443 (http over SSL)
- tcp 1564 (Microsoft Media Player streaming)

For Firewall Information for Windows Media Services 9 Series, use the following link:

<http://www.microsoft.com/windows/windowsmedia/forpros/serve/firewall.aspx>.

5.0 Download and Installation Instructions

Note: Your experience may differ from the following pages depending on the product version you install.



5.1 How to download Internet Explorer

You probably already have Internet Explorer installed on your computer. Even so, we recommend that you download and install the latest version of Internet Explorer. To download the latest version of Microsoft Internet Explorer, use the following link:

<http://www.microsoft.com/ie/>

5.2 How to download JAVA Software

To automatically download and install JAVA Software, use the following link:

<http://www.java.com/en/download/index.jsp>.

Once you are on this JAVA web page, click on the button “**Free JAVA Download**”. On the next page, click on the button “**Agree and Start Free Download**”. We recommend that you Bookmark this page as it contains complete (with screenshots) Java installation instructions. Once you have completed your Java software installation, you will be given the opportunity to “**Verify Installation**”. If problems occur, help is offered by Java Software at this time.

NOTE:

A problem has been discovered with the versions of Java beginning with Version 6 Update 10. The new Java plug-in causes an incompatibility when launching the DVOD content of several courses.

The problem is reported in a dialog "There was a problem getting the DVOD settings: 404"

In addition to this launching problem we have also found that some courses will not mark as complete and/or the tests will not complete the grading process.

Until a resolution is in place you may work around the problems by “Switching between the old Java Plug-in and the next generation Java Plug-in.”

The new Java Plug-in is enabled by default. However if there are issues running applets with the new Java Plug-in the user can switch to the old Java plug-in without any manual manipulation of the windows registry and moving files.

Steps to switch between Java Plug-ins

1. Click Start.
2. Click Control Panel.
3. Double click on Java Control Panel.
4. Click Advance tab in Java Control Panel.
5. Scroll to Java Plug-in entry.
6. Uncheck the check box for Enable next-generation Java Plug-in.
7. Click Ok and restart the system.

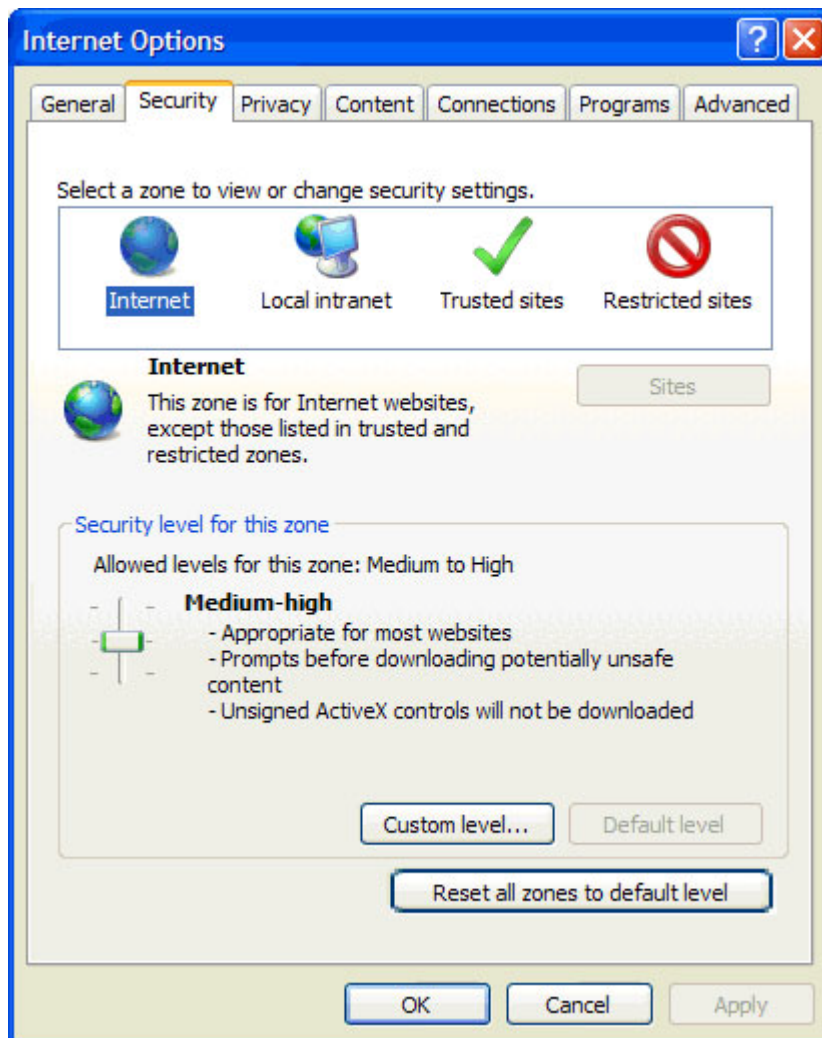
See http://www.java.com/en/download/help/new_plugin.xml for more information.

5.3 Configuring Internet Explorer for use with CiNow

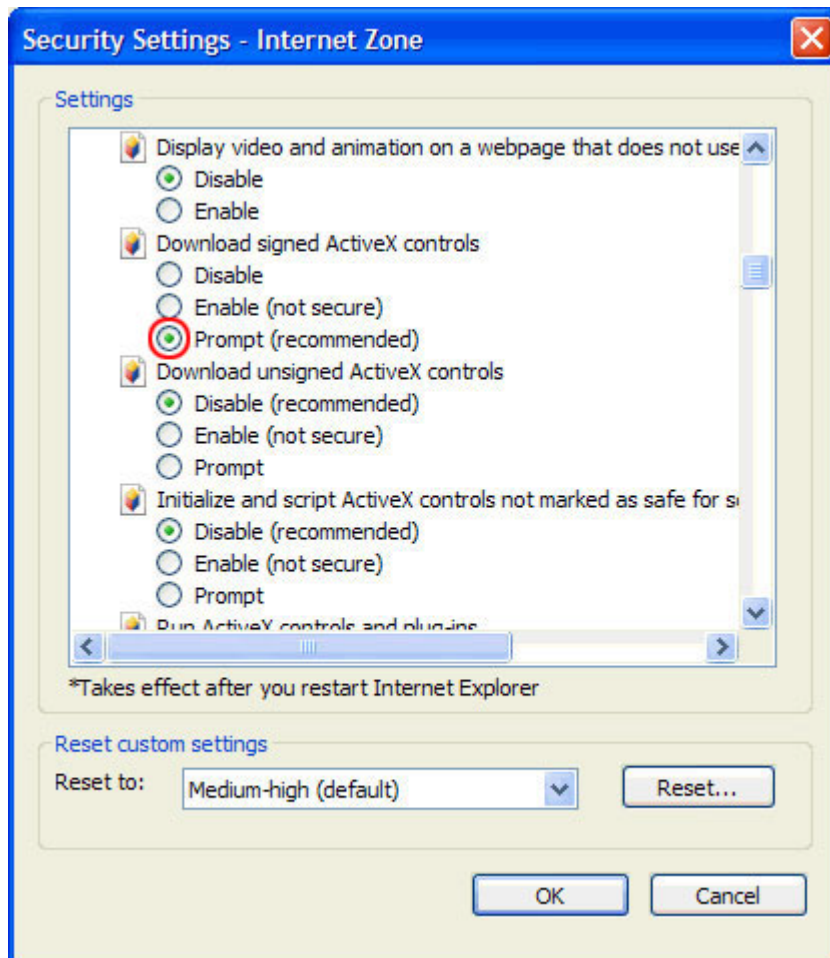
The Internet zone consists of all Web sites that are not included in the other zones. By default, the Internet zone is set to the “**Medium-high**” security level. On older versions of Internet Explorer, the default security level setting is “**Medium**”. If you are concerned about possible security problems when users browse the Internet, you might want to change the security level to High. However, if you raise the security level, Internet Explorer prevents some Web pages from performing certain potentially harmful operations. As a result, some pages might not function or be displayed properly. Rather than use the High security level, you might want to choose the **Custom level** so that you can control each individual security decision for the zone.

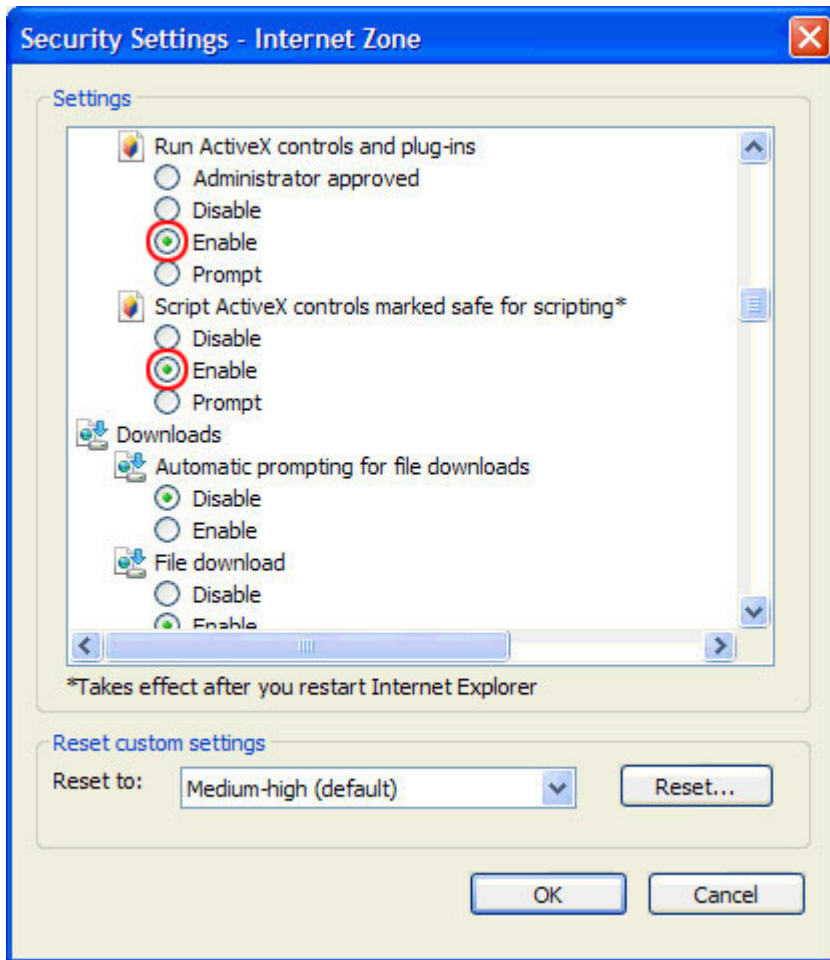
To confirm your Security level is configured (at **Medium-high**) to use **CiNow**, with Internet Explorer open, on the **Tools** menu, click **Internet Options**, and then click the **Security** tab.

With the **Internet** zone selected, confirm that the Security level for this zone is set at **Medium-high**.



Next, with **Internet Options** still open, scroll down to confirm the correct settings for **ActiveX** are selected. Refer to the following two screenshots.





5.4 How to download Adobe Acrobat Reader

We also recommend that you download and install Adobe Acrobat Reader. The current version is available free at the following link:

<http://www.adobe.com/products/acrobat/readstep2.html>

Click “Continue” to install Adobe Reader

Note that there is need to install any browser tool bar add-ons. The same is true for any other “free” add-ons or “helper” applications.