

Cengage web-based learning platforms require broadband internet access and supported web browsers and plugins.

System Requirements

Supported Browsers on Windows®

Browser	MindTap	SAM	WebAssign	CNOWv2 / OWLv2
Chrome™	119 and 120	current and preceding version	119 and later	current and preceding version
Firefox®	120	current and preceding version	120 and later	current and preceding version
Edge	119 and 120	current and preceding version	119 and later	current and preceding version

Supported Browsers on macOS™

Browser	MindTap	SAM	WebAssign	CNOWv2 / OWLv2
Chrome	119 and 120	current and preceding version	119 and later	current and preceding version
Firefox	unsupported	current and preceding version	unsupported	current and preceding version
Safari®	15 and 16	current and preceding version	15 and later	current and preceding version

Supported Browsers on Chrome OS™

Browser	MindTap	SAM	WebAssign	CNOWv2 / OWLv2
Chrome	119 and 120	unsupported	119 and later	current and preceding version

Workstation Recommendations

- Download bandwidth: 5+ Mbps/student
The total lab bandwidth should be sufficient for the number of workstations.

For example, 30 workstations × 5 Mbps = 150 Mbps.

- RAM: 2+ GB
- CPU: 1.8+ GHz / multi-core
- Display: 1366 × 768, color
- Graphics: DirectX, 64+ MB
- Sound (for some content)

Browser Settings

Configure the following settings in your web browser.

Important

In a lab where students share computers, make sure that browser data, including cached files and cookies, is automatically cleared between user sessions.

See your browser's help information for specific instructions.

- Allow cookies and pop-up windows for the following sites:
 - cengage.com and subdomains of cengage.com such as gateway.cengage.com and ciam.cengage.com
 - sam.cengage.com
 - webassign.net
 - cengagenow.com and subdomains of cengagenow.com
 - cengage.celebrus.com

Cengage uses an encrypted cookie file to authenticate your identity each time you give or request information like activities or grades. This helps to protect your information without requiring you to sign in repeatedly. The cookie is deleted when you sign out or close your browser.

Note

To allow pop-up windows, you might need to configure or turn off third-party extensions or toolbars in addition to your browser settings.

- Accept third-party cookies.

Third-party cookies are used for authentication with some learning management systems (LMS) such as Blackboard.
- Allow JavaScript.

This is the default setting.
- Set your browser to check for newer versions of cached pages and refresh automatically.

Browser Plugins

Some content and tools might require the following browser plugins.

Apple® QuickTime®

support.apple.com/downloads/quicktime

Java

The Java plugin is not supported in Chrome or Microsoft Edge. Use Safari or Firefox to access Java content and features.

www.java.com/getjava

PDF Reader (Adobe Reader or Apple Preview)

Current versions of Chrome, Edge, Firefox, and Safari can display and print PDF files.

get.adobe.com/reader

RealPlayer

www.real.com

Note

If your institution uses disk image protection software like Deep Freeze or Clean Slate, install software in a safe area of the workstation's disk that will not be overwritten by these utilities.

Microsoft Office

SAM 365 and 365/2021 Projects

Windows 10 or later

Microsoft 365® subscription or Microsoft Office® 2021 Home, Premium, or University

macOS 10.14 or later

Microsoft 365 Home/Premium subscription or Microsoft Office 2021 Home/Student

Not compatible with Microsoft Office Online. Office® Online files have a different structure than files created on the desktop version of Office.

SAM 2019 Projects

Windows 10 or later

Microsoft 365 subscription or Microsoft Office 2019 Home, Premium, or University

macOS 10.14 or later

Microsoft 365 Home/Premium subscription or Microsoft Office 2019 Home/Student

Not compatible with Microsoft Office Online. Office Online files have a different structure than files created on the desktop version of Office.

SAM 2019 Projects for Office Online

Requires a supported browser, but no other installation or subscription.

SAM 2016 Projects

Windows Server 2008 R2 or later

Microsoft Office 2016/365 Home, Premium, or University

macOS on Intel

Microsoft Office for Mac 2016 Home/Business or Office 365®/2021 Home, Premium, or University

Not compatible with Microsoft Office Online. Office Online files have a different structure than files created on the desktop version of Office.

Language Setting

The computer's region must be set to English (US).

- support.microsoft.com/en-us/account-billing/how-to-change-your-country-or-region-for-microsoft-store-and-more-e180415a-b4ad-7a9c-ef29-139bc71b1d09
- support.apple.com/guide/mac-help/change-language-region-settings-on-mac-intl163/mac

Network Testing

Student success depends on reliable and fast access to learning materials. Although the results of network testing can vary and are affected by many factors, these tests can help you spot potential problems and troubleshoot issues.

Test Bandwidth

If needed, test the actual download bandwidth from a workstation in the lab.

- 1 Open a browser and go to www.speedtest.net.
- 2 Click **Go** to start the test.

Test Media Playback

If needed, use YouTube to test the performance of streaming video from a workstation in the lab.

- 1 Open a browser and go to www.youtube.com.
- 2 Play a video.
- 3 Test with multiple workstations simultaneously.

If you observe problems like delayed playback or pauses, ask your network administrator for help. If problems with simultaneous playback of multiple videos can't be fixed, consider having students start work at different times to distribute bandwidth usage over time.

Test Route to Server

Get information about the routers and transmission times between a workstation in the lab and a Cengage server.

- 1 Open a command prompt or terminal window.
- 2 Type the traceroute command:

Windows: `tracert address`

macOS or Linux®: `traceroute address`

where *address* is the web address of the service you are trying to reach.

```
tracert sam.cengage.com
tracert to e4037.x.akamaiedge.net, 64 hops max, 72 byte packets
 1  10.14.15.254                2.73 ms  1.44 ms  1.56 ms
 2  10.0.0.1                    1.31 ms  *        2.84 ms
 3  rtp-gw-to-webassign.ncrn.net 3.58 ms  3.95 ms  3.90 ms
 4  9-1-3.ear3.washington1.level3.net 10.66 ms  9.58 ms  9.51 ms
```

```
5 a23.static.akamaitechnologies.com 32.20 ms 32.56 ms 32.13 ms
```

- Each numbered row is a hop/router between your computer and the destination address.
 - More than around 18 hops might cause performance problems.
 - Each row lists transmission times for each of the three packets sent as part of the test. Transmission times should not exceed 80-120 ms.
 - An asterisk means that the server did not respond to the request; this is often intentional.
- If the test shows high transmission times or hop counts, ask your network administrator for help.

Test Time to Reach Server

Get information about reachability of a Cengage server from a workstation in the lab.

- 1 Open a command prompt or terminal window.
- 2 Type the traceroute command:

Windows: ping /n 10 *address*

macOS or Linux: ping -c 10 *address*

where *address* is the web address of the service you are trying to reach.

```
ping -c 10 sam.cengage.com
PING e4037.x.akamaiedge.net (23.38.114.139): 56 data bytes
64 bytes from 23.38.114.139: icmp_seq=0 ttl=53 time=31.946 ms
64 bytes from 23.38.114.139: icmp_seq=1 ttl=53 time=32.004 ms
64 bytes from 23.38.114.139: icmp_seq=2 ttl=53 time=32.332 ms
64 bytes from 23.38.114.139: icmp_seq=3 ttl=53 time=32.202 ms
64 bytes from 23.38.114.139: icmp_seq=4 ttl=53 time=33.316 ms
64 bytes from 23.38.114.139: icmp_seq=5 ttl=53 time=31.897 ms
64 bytes from 23.38.114.139: icmp_seq=6 ttl=53 time=33.850 ms
64 bytes from 23.38.114.139: icmp_seq=7 ttl=53 time=32.509 ms
64 bytes from 23.38.114.139: icmp_seq=8 ttl=53 time=33.872 ms
64 bytes from 23.38.114.139: icmp_seq=9 ttl=53 time=33.218 ms

--- e4037.x.akamaiedge.net ping statistics ---
10 packets transmitted, 10 packets received, 0.0% packet loss
round-trip min/avg/max/stddev = 31.897/32.715/33.872/0.739 ms
```

Round trip times should be less than 120 ms and packet loss should be less than 1%.

If the test shows high round trip times or packet loss, ask your network administrator for help.

Sites to Allow

To ensure that Cengage learning platforms work correctly, the following sites should not be blocked by firewalls. Browsers should also allow cookies and pop-up windows for these sites.

Primary sites

cengage.com and subdomains of cengage.com such as gateway.cengage.com and ciam.cengage.com
 sam.cengage.com
 webassign.net
 cengagenow.com and subdomains of cengagenow.com
 cengage.celebrus.com

Subdomains of cengage.com

gateway.cengage.com
 ciam.cengage.com

System Requirements for Cengage Learning Platforms

samcp.cengage.com
samcpws.cengage.com
ng.cengage.com
cnow.apps.ng.cengage.com
aplia.apps.ng.cengage.com
college.cengage.com
static.mindtap.cengage.com
delmarlearning.com
app-na.readspeaker.com
als.cengage.com
cxp.cengage.com

Additional sites

cdnjs.cloudflare.com
v2.cengagenow.com
instructor.cengagenow.com and subdomains

Bandwidth shaping and content filtering on the campus network might negatively affect performance. The listed sites should be excluded from bandwidth restrictions or given bandwidth preference.

Also ensure that the standard HTTP/HTTPS Ports (ports 80 and 443) are open.

More Information

MindTap

- help.cengage.com/mindtap/mt-instructor/

SAM

- help.cengage.com/sam/lab-admin
- help.cengage.com/sam/instructor
- help.cengage.com/sam/instructor-kb

WebAssign

- help.cengage.com/webassign/instructor_guide/

CNOWv2

- help.cengage.com/cnowv2/instructor

OWLv2

- help.cengage.com/owlv2/instructor

Platform Status

Check the current status of Cengage learning platforms.

techcheck.cengage.com

System Requirements for Cengage Learning Platforms

Terms of Use

www.cengage.com/legal/#terms

Privacy Policy

www.cengagegroup.com/privacy/