

Internet Browser Security Upgrade: Settings to Protect Yourself and Your Data

Having TLS 1.1 and 1.2 enabled in your web browser will help prevent eavesdropping, tampering and impersonation.

Websites use an "s" to distinguish themselves as secure, which is why you see <https://> in front of website URLs instead of just [http](http://). The security behind [https](https://) sites is changing since older versions of security have been compromised. All industries are now required to use a more secure encryption protocol called TLS 1.1 and 1.2 and people without these protocols enabled may no longer be able to access certain websites or portions of websites, and starting at the end of June 2018 may no longer be able to make purchases online.

To ensure you have the best protection, please configure **Internet Explorer, Chrome, Firefox, Opera or Safari to support TLS 1.1 and 1.2 by following the steps below**. If you are using a web browser other than those listed here, consult the 'Help' for your web browser to enable TLS 1.1 and 1.2.

FAQs and Troubleshooting Tips are contained at the end of this document.

Internet Explorer

To enable TLS 1.1 and 1.2 in Internet Explorer, perform the following steps:

1. Open Internet Explorer.
2. Click the **Tools** drop down menu on the toolbar.
3. Select **Internet Options** to open the Internet Options dialog window.
4. Click the **Advanced** tab at the top of the **Internet Options** dialog window.
5. Scroll down to the header labeled "**Security**".
6. In the **security** section, scroll down and check the box next to "**Use TLS 1.2**" and "**Use TLS 1.1**" to add both.
7. **(optional)** You may **deselect "Use TLS 1.0"** if your institution does not require it for other work you do.
8. Click both the **Apply** and **OK** button at the bottom of the dialog window to confirm the change.
9. Close and restart Internet Explorer or use the "**F5**" key to refresh your browser.

Google Chrome:

To enable TLS 1.1 and 1.2 in Chrome, perform the following steps:

1. Open Google Chrome
2. Click **Alt F** and select "**Settings**".
3. Scroll down and select "**Show advanced settings...**"
4. Scroll down to the **System** section and click on "**Open proxy settings...**"
5. Select the "**Advanced**" tab.
6. Scroll down to the "**Security**" section.
7. Locate and check "**Use TLS 1.2**" and "**Use TLS 1.1**" to add them.
8. **(optional)** You may **deselect "Use TLS 1.0"** if your institution does not require it for other work you do.
9. Click the "**OK**" button.
10. Close and restart Chrome.

Mozilla Firefox (Two options)

- A. To enable TLS 1.1 and 1.2 in **newer** versions of Firefox, perform the following steps:
1. Open FireFox
 2. In the URL (address) bar type in "**about:config**" and press **Enter**
 3. In the Search field, enter **tls**.
 4. Click on "**security.tls.version.max**", press **Enter**, and **set the value to "3"** (TLS 1.2)
 5. Scroll down to "**security.tls.version.min**", press **Enter**, and **set the value to "2"** (TLS 1.1).
 6. **(optional)** You may want to select a **minimum value of "1"** (TLS 1.0) in the prior step if your institution requires TLS 1.0 for other work you do.
 7. Click "**OK**".
- B. To enable TLS 1.1 and 1.2 in **older** versions of Firefox, perform the following steps:
1. Open the browser.
 2. Click the **Tools** drop down menu
 3. Select **Options** to open the Options dialog window.
 4. Click the **Advanced** icon at the top of the **Options** dialog window.
 5. Click the **Encryption** tab in the area of the window below the icons.
 6. Check the box next to "**Use TLS 1.2**" and "**Use TLS 1.1**" under **Protocols** to add them.
 7. **(optional)** You may **deselect "Use TLS 1.0"** if your institution does not require it for other work you do.
 8. Click the **OK** button at the bottom of the dialog window to confirm the change.

Opera:

To enable TLS 1.1 and 1.2 in Opera, perform the following steps:

1. Open Opera
2. Click **Ctrl+F12**
3. Click on "**Security**"
4. Click on "**Security Protocols...**".
5. Locate and check "**Use TLS 1.2**" and "**Use TLS 1.1**" to add them.
6. **(optional)** You may **deselect "Use TLS 1.0"** if your institution does not require it for other work you do.
7. Click the "**OK**" button.
8. Click the "**OK**" button.

Safari:

There are no options for enabling SSL or TLS protocols. If you are using Safari version 7 or greater, TLS 1.1 and 1.2 are automatically enabled.

Frequently Asked Questions

What browsers/versions will provide the option for TLS 1.1 and 1.2?

Browser	Versions
Internet Explorer	9 or higher
Chrome	41 or higher
Firefox	36 or higher
Opera	27 or higher
Safari	7 or higher; 5 or higher on Windows, iOS 9

Are there older versions of operating systems/ browser combinations that will not support TLS 1.1 and 1.2?

Yes. Windows XP and Windows Vista are only capable of upgrading up to Internet Explorer version 8. Therefore, users of XP or Vista using Internet Explore as their browser should load the latest version of another browser such as Firefox or Chrome.

Troubleshooting

Once you have verified that you have enabled the TLS 1.1 and 1.2 options in the previous steps, go to <https://www.howssmyssl.com> and check the Version section. It should report "Good" or "Probably Okay". If it reports Improvable or Bad this could be an indication of an issue with your machine such as a virus or malware. You will need to troubleshoot the issue that is not allowing your machine to accept the TLS changes.

Good	Using TLS 1.2	Improvable	Using TLS 1.1, but not TLS 1.2
Probably Okay	Using TLS 1.2 and 1.1	Bad	Using TLS 1.0

1. Check if you have current antivirus and/or malware protection.
 - a. If "yes" then verify the definitions are current and to run a scan. After any issues have been corrected, try <https://www.howssmyssl.com> to verify if the version now shows "Good" or "Probably Okay".
 - b. If "no" consider evaluating some of the programs available, some of which are free. Once current virus/malware scans have run and any issues have been corrected, try the site <https://www.howssmyssl.com> to verify if the version now shows "Good" or "Probably Okay".
2. Make sure your computer has the most recent Updates and Patches.
3. You also may want to seek local computer repair, if necessary, to determine what is not permitting your computer to report "Good" or "Probably Okay" even though the TLS 1.1 and 1.2 options are enabled.