

1. What is and Why using TLS 1.2 ?

TLS 1.2 is an acronym for “Transport Layer Security,” version 1.2, which is the protocol that allows digital devices (such as computers and phones) to communicate over the internet securely without the transmission being vulnerable to an outside audience.

2. Internet browser compatibility guidelines

The following table lists the TLS 1.2 compatibility with most common internet browsers.

Compatibility Tables

Browsers

	TLS 1.0	TLS 1.1	TLS 1.2	TLS 1.3
Mobile IE version 10 and below	✓	✗	✗	✗
Desktop IE versions 7 and below	✓	✗	✗	✗
Desktop IE versions: 8, 9, and 10	✓	Partial [See Note 1]	Partial [See Note 1]	✗
Desktop and mobile IE version 11	✓	✓	✓	✗
Microsoft Edge	✓	✓	✓	✗
Mozilla Firefox 22 and below	✓	✗	✗	✗

Mozilla Firefox 23 to 26	✓	Partial [See Note 2]	Partial [See Note 2]	✗
Mozilla Firefox 27 and higher	✓	✓	✓	✗
Google Chrome 21 and below	✓	✗	✗	✗
Google Chrome 22 to 37	✓	Partial [See Note 3]	Partial [See Note 3]	✗
Google Chrome 38 and higher	✓	✓	✓	✗
Android 4.3 (Jelly Bean) and below	✓	✗	✗	✗
Android 4.4 (Kitkat) to 4.4.4	✓	Partial (See Note 4)	Partial (See Note 4)	✗
Android 5.0 (Lollipop) and higher	✓	✓	✓	✗
Mobile Safari for iOS 4 and below	✓	✗	✗	✗
Mobile Safari versions 5 and higher for iOS 5 and higher	✓	✓	✓	✗

Desktop Safari versions 6 and below for OS X 10.8 (Mountain Lion) and below	✓	✗	✗	✗
Desktop Safari versions 7 and higher for OS X 10.9 (Mavericks) and higher	✓	✓	✓	✗
<u>Desktop Clients</u>				
	TLS 1.0	TLS 1.1	TLS 1.2	TLS 1.3
Windows XP	✓	✗	✗	✗
Windows XP SP3	✓	✓	✗	✗
Windows Vista	✓	✗	✗	✗
Windows 7 SP1	✓	✓	✓	✗
Windows 8	✓	Partial [See Note 5]	Partial [See Note 5]	✗
Windows 8.1	✓	✓	✓	✗

Windows 10	✓	✓	✓	X
MAC OS X 10.2 and 10.3	✓	X	X	X
MAC OS X 10.4 and 10.5	✓	X	X	X
MAC OS X 10.6 and 10.7	✓	X	X	X
MAC OS X 10.8	✓	X	X	X
MAC OS X 10.9	✓	✓	✓	X
MAC OS X 10.10	✓	✓	✓	X
MAC OS X 10.11	✓	✓	✓	X
MAC OS X 10.12	✓	✓	✓	X
MAC OS X 10.13	✓	✓	✓	X
Linux	✓	X	X	X

Mobile Clients

	TLS 1.0	TLS 1.1	TLS 1.2	TLS 1.3
Airwatch	✓	✓	Partial [See more]	✗
Android versions: 1.0 to 4.4.4	✓	✗	✗	✗
Android versions: 5.0 to 8.1 and Android P	✓	✓	✓	✗
iPhone OS versions: 1, 2, 3, and 4	✓	✗	✗	✗
iPhone OS versions: 5, 6, 7, 8, 9, 10, and 11	✓	✓	✓	✗
MobileIron Core versions 9.4 and below	✓	✗	✗	✗
MobileIron Core versions 9.5 and higher	✓	✓	✓	✗

MobileIron Cloud	✓	✓	✓	X
Windows Phone versions: 7, 7.5, 7.8 and 8	✓	X	X	X
Windows Phone version 8.1	✓	✓	✓	X
Windows 10 Mobile versions: v1511, v1607, v1703, and v1709	✓	✓	✓	X

Note 1: For desktop IE versions: 8, 9, and 10 are only compatible with TLS 1.1 and TLS 1.2 when running Windows 7 or newer, but it is disabled by default. To enable it, please check the guidelines found [here](#) for more information.

Note 2: For Firefox 23 to 26: use about:config to enable TLS 1.1 and TLS 1.2 by updating the security.tls.version.max config value to 2 for TLS 1.1 or 3 for TLS 1.2.

Note 3: For Google Chrome 22 to 37: TLS 1.1 and TLS 1.2 are compatible when running on Windows XP SP3, Vista, or newer (desktop), OS X 10.6 (Snow Leopard) or newer (desktop), or Android 2.3 (Gingerbread) or newer (mobile).

Note 4: For Android 4.4: it may be compatible with TLS 1.1 and TLS 1.2 but some devices with Android 4.4.x may not support TLS 1.1 or higher.

Note 5: For Windows 8: TLS 1.1 and TLS 1.2 can be enabled by following the guidelines found [here](#) for more information.

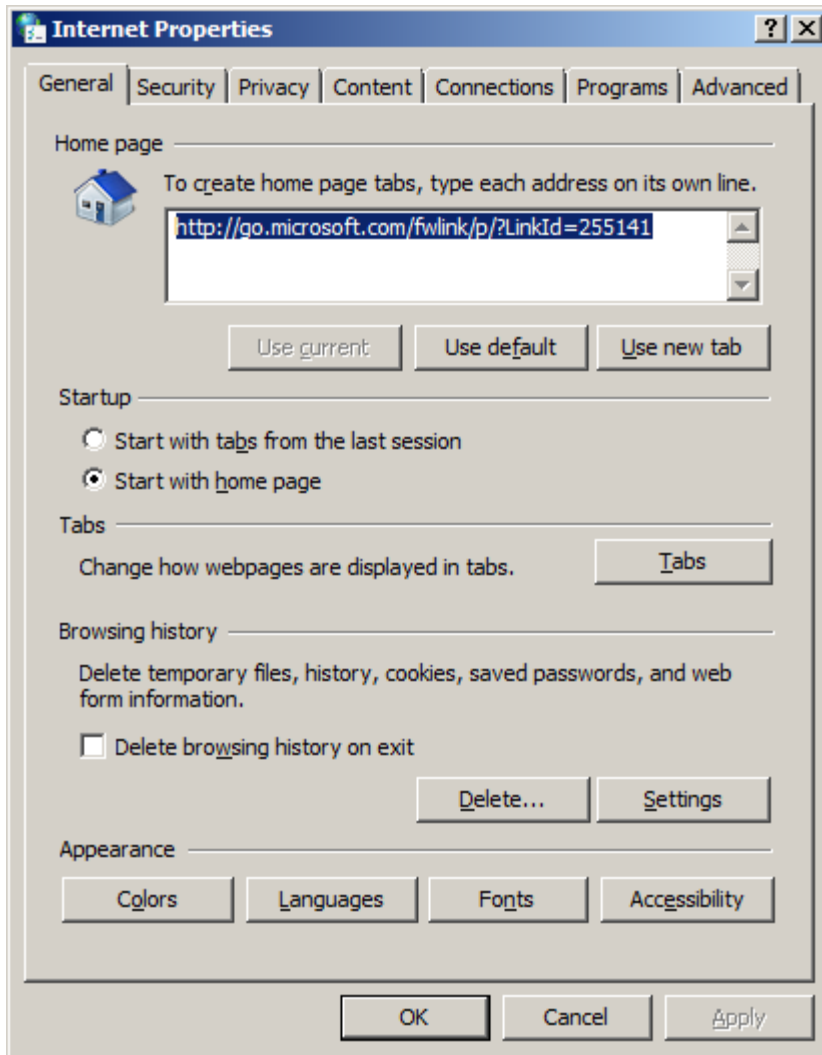
Source:

<https://support.globalsign.com/ssl/general-ssl/tls-protocol-compatibility>

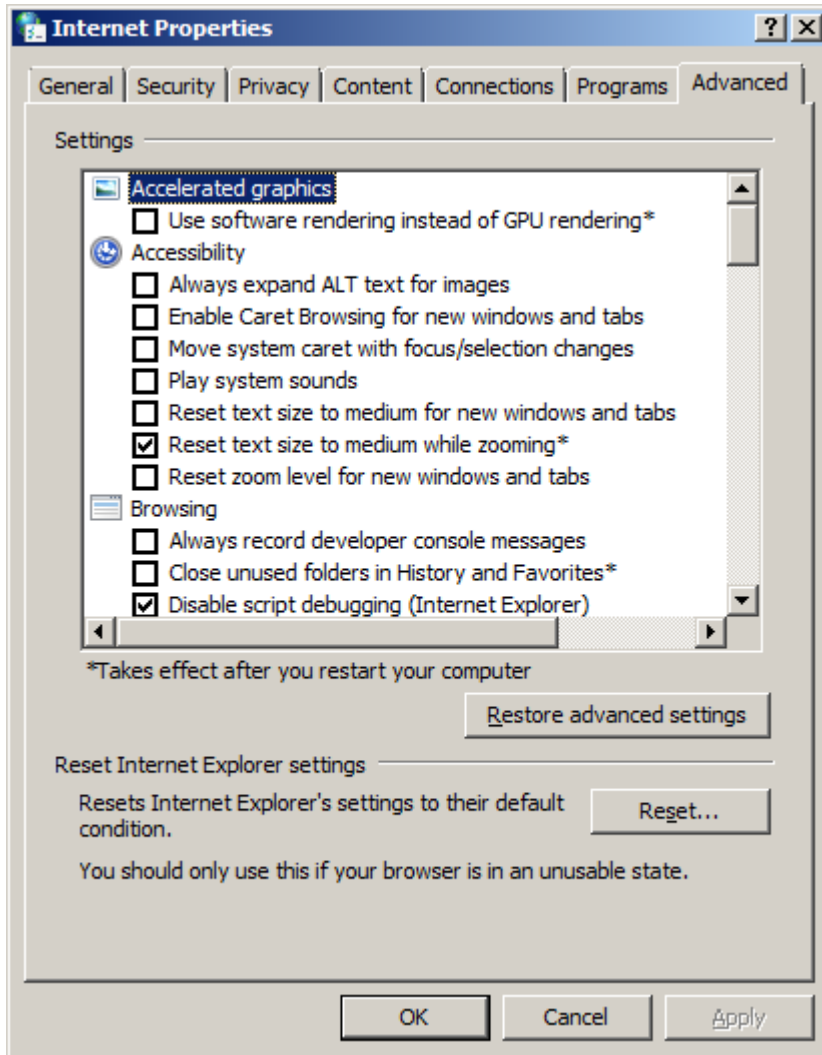
3. Steps to enable TLS 1.2

3.1 Steps to enable TLS 1.2 on Windows

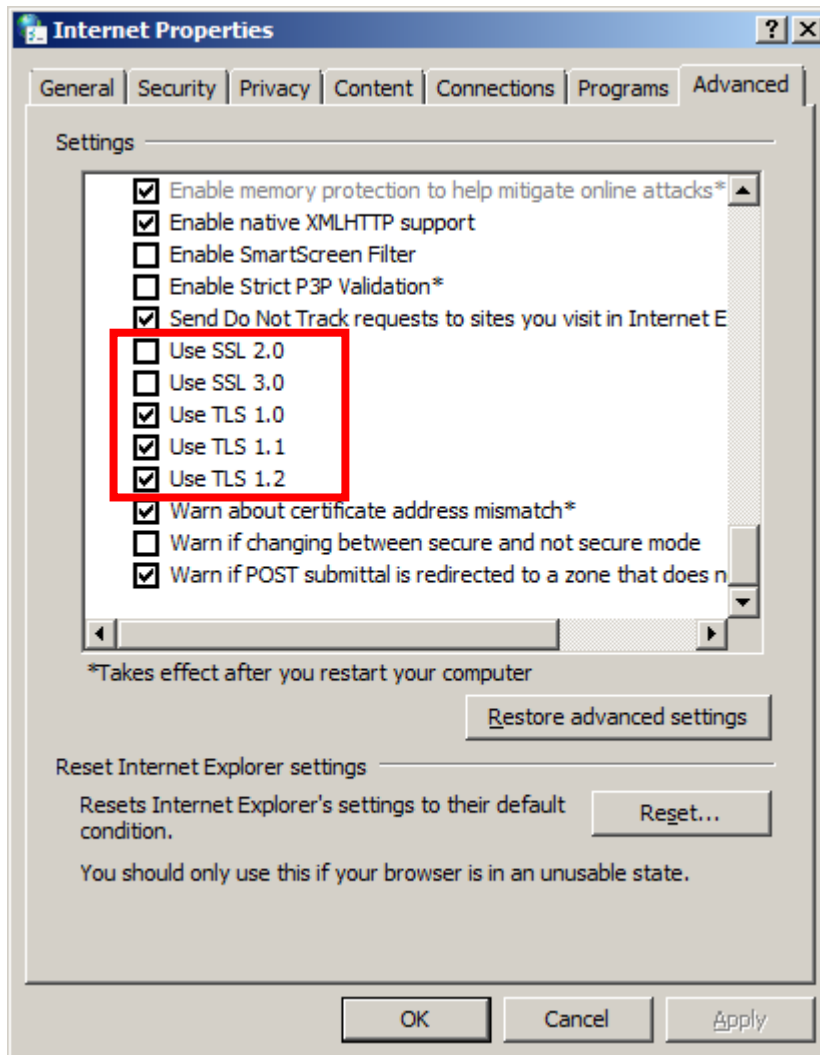
1. Press Start > Control Panel
2. Click on Network and Internet
3. Click on Internet Options



4. Select the Advanced tab.



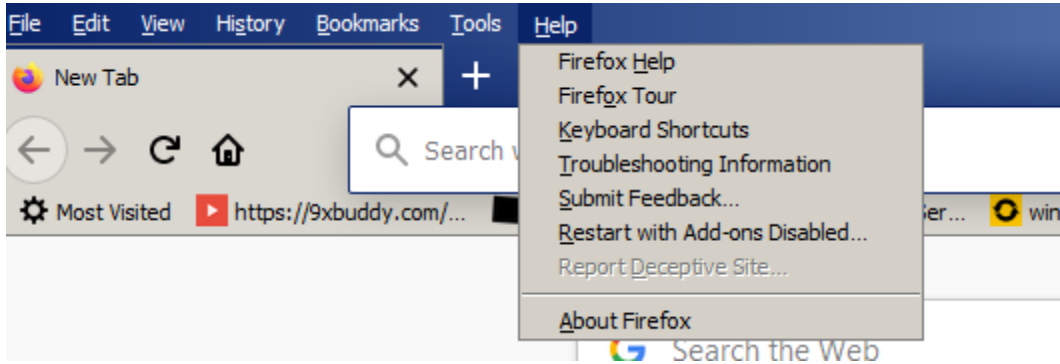
5. Scroll down to the Security section at the bottom of the Settings list.



6. Select Use TLS 1.1 and Use TLS 1.2.
7. For extra security, deselect Use SSL 3.0. When complete, your settings should match the following:
 - a. **Selected:** Use TLS 1.0, Use TLS 1.1 and Use TLS 1.2
 - b. **Not selected:** Use SSL 2.0 and Use SSL 3.0

3.2 Steps to update Firefox (Current Version: 75.0)

1. In Firefox browser, click on Help > About Firefox




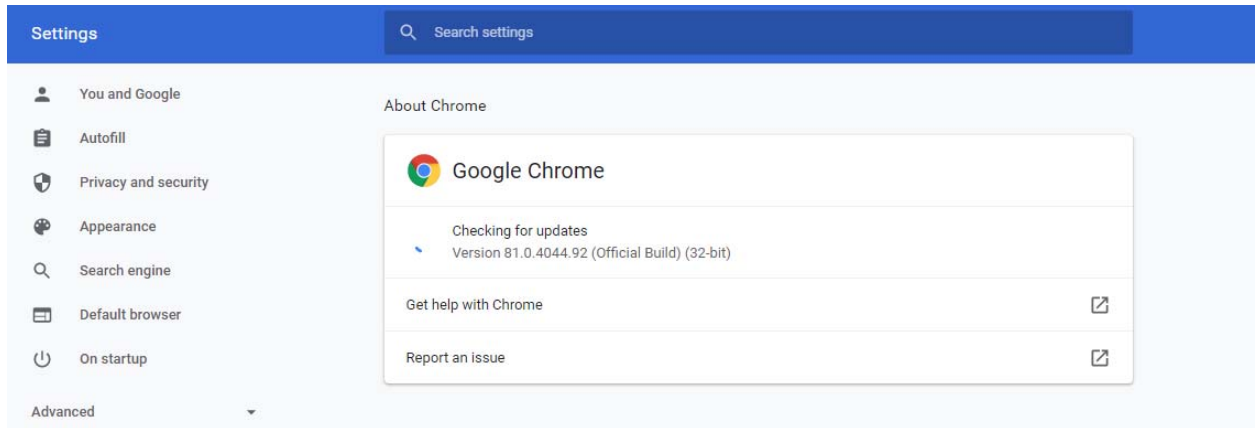
2. Firefox will check for update and will update the browser automatically



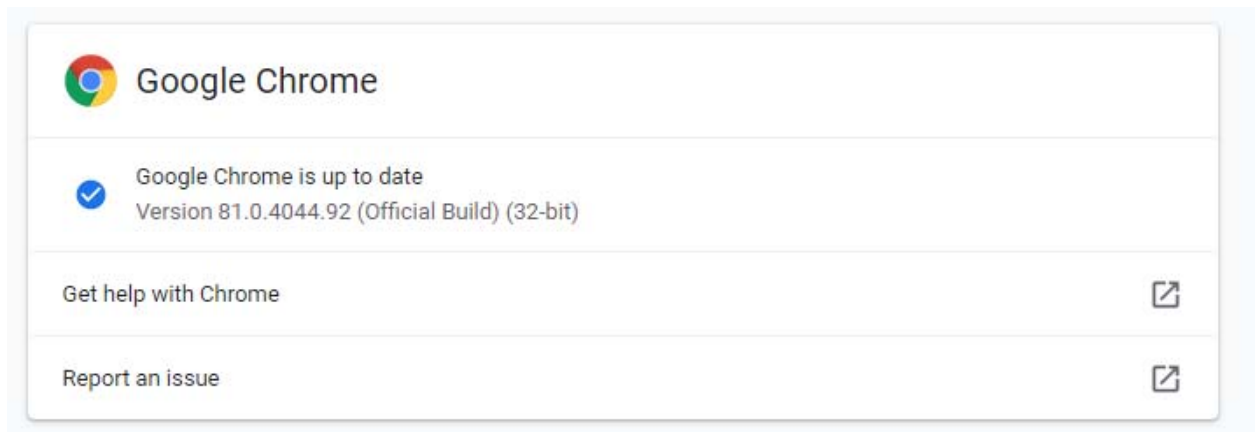
3. After updating, restart firefox and repeat step 1 and 2. Firefox is up to date will be shown.

3.3 Steps to update Google Chrome (Current version:81)

1. In Google Chrome browser, click on  button and select Help > About Google Chrome



2. Google Chrome will start to check for update and will update the browser.
3. Restart the browser and repeat step 1.
4. Google Chrome will show the browser has been updated.



3.4 Updating Internet Explorer

Internet Explorer is normally automatically updated through the Windows Update process. Check the Internet Explorer version by clicking on Help > About Internet Explorer on the Internet Explorer browser.



The table below shows which versions of Internet Explorer have TLS 1.2 enabled by default, the versions you need to enable TLS 1.2 manually, and unsupported versions:

Internet Explorer version	Windows 8.1 and newer	Windows 8 and 7	Windows Vista, XP and older
11	Enabled by default	Enabled by default	Enabled by default
10, 9 and 8	Enabled by default	Enable TLS 1.2 manually	Not supported

Otherwise Internet Explorer can be manually updated to version 11 by clicking on the links below

Internet Explorer 32 bit version

<http://download.microsoft.com/download/9/2/F/92FC119C-3BCD-476C-B425-038A39625558/IE11-Windows6.1-x86-en-us.exe>

Internet Explorer 64 bit version

<http://download.microsoft.com/download/7/1/7/7179A150-F2D2-4502-9D70-4B59EA148EAA/IE11-Windows6.1-x64-en-us.exe>

Run the downloaded installer to update your Internet Explorer.

Disclaimer:

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