How to Disable Browser Support for the SSL 3.0 Protocol

Depending on how your browser is configured, you may want to disable SSL v3 and enable TLS 1.0, TLS 1.1, and TLS 1.2 (if these protocols are not enabled by default). Note that older versions of Internet Explorer may not have the TLS 1.1 and 1.2 protocols.

• Internet Explorer

Internet Explorer: How to Disable the SSL v3 Protocol

• Mozilla Firefox

Mozilla Firefox: How to Disable the SSL v3 Protocol

Google Chrome

Google Chrome: How to Disable the SSL v3 Protocol

Internet Explorer: How to Disable the SSL 3.0 Protocol

Although these instructions and screenshots are for Internet Explorer (IE) 10, they will work for other versions of IE.

- 1. Open IE.
- 2. In IE, click the **Tools** symbol (gear) and then, click **Internet Options**.

| 🛃 Internet Explorer Enhanced Security Configuration is not enabled - Windows Internet Explorer | | | | | | |
|--|---|---|--|--|--|--|
| 🕞 🕞 🗢 🌈 res://iesetu | p.dl/SoftAdmin.htm 🔎 🖌 🍘 Internet Explorer Enhanced 🗙 | 🔓 🛧 🛱 | | | | |
| | Caution: Internet Explorer Enhanced Security Configuration is not enabled Windows Internet Explorer Enhanced Security Configuration configures your server and Internet Explorer in a way that decreases the exposure attacks through Web content and application scripts. This is done by raising the default security levels on Internet Explorer security zones and cl | Print File Soom (100%) Safety | | | | |
| | Keeping the Internet Explorer Enhanced Security Configuration enabled on your servers is recommended to help ensure that your servers are n malware or other browser-based attacks. For more information, including the complete list of changes that are implemented by Internet Explore Configuration, see the <u>Internet Explorer Enhanced Security Configuration</u> overview. | Add site to Start menu View downloads Ctrl+J Manage add-ons | | | | |
| | To turn on Internet Explorer Enhanced Security Configuration | F12 developer tools Go to pinned sites | | | | |
| | 1. Close any Internet Explorer windows that you might have open. | Internet options | | | | |
| | 2. Open Server Manager. | About Internet Explorer | | | | |
| | If your server is running Windows Server® 2008 R2, in the Security Information section of Server Summary, click Configure IE ES Internet Explorer Enhanced Security Configuration dialog. | C to open the | | | | |
| | If your server is running Windows Server® 2012, click Configure this local server to open the Local Server configuration page. Then, in the Properties area, next to IE Enhanced Security Configuration, click Off to open the Internet Explorer Enhanced Security Configuration dialog. | | | | | |
| | 3. To use Internet Explorer Enhanced Configuration when members of the local Administrators group are logged on, under Administrators cliv | ck On. | | | | |
| | 4. To use Internet Explorer Enhanced Configuration when all other users are logged on, under Users click On (Recommended). | | | | | |
| | 5. Click OK to apply your changes. | | | | | |
| Note: Once the Internet Explorer Enhanced Configuration is turned on for both sets of users, Server Manager will display On (Recommended) next to Internet Explorer Enhanced Security Configuration. | | | | | | |

3. In the **Internet Options** window on the **Advanced** tab, under **Settings**, scroll down to the **Security** section.



 In the Security section, locate the Use SSL and Use TLS options and uncheck Use SSL 3.0 and Use SSL 2.0.

| Internet Options ? 🗙 | | | | |
|--|--|--|--|--|
| General Security Privacy Content Connections Programs Advanced Settings | | | | |
| Use SSL 2.0 Use SSL 3.0 Use TLS 1.0 Use TLS 1.1 Use TLS 1.2 ✓ Warn about certificate address mismatch* Warn if changing between secure and not secure mode ✓ Warn if POST submittal is redirected to a zone that does n | | | | |
| *Takes effect after you restart your computer | | | | |
| <u>R</u> estore advanced settings | | | | |
| Reset Internet Explorer settings | | | | |
| Resets Internet Explorer's settings to their default Reset | | | | |
| You should only use this if your browser is in an unusable state. | | | | |
| OK Cancel Apply | | | | |

5. If they are not already selected, check **Use TLS 1.0**, **Use TLS 1.1**, and **Use TLS 1.2**.

Note: If not all the TLS options are available, just check the ones that are. For example, in IE6, the **Use TLS 1.0** may be the only available TLS option.

6. Next, click **Apply** and then, click **OK**.

You have successfully disabled the SSL 3.0 protocol in your IE browser.

Mozilla Firefox: How to Disable the SSL 3.0 Protocol

Firefox is currently working on a new version of the Firefox browser in which the SSL 3.0 protocol support has been removed. If you don't want to wait for that version to come out, you can use these instructions to turn off the SSL 3.0 support, until the next version of Firefox is released.

Although these instructions and screenshots are for Mozilla Firefox 31, they will work for other versions of Firefox.

- 1. Open Firefox.
- 2. In the Location Bar, enter *about:config* and click the Go to the address in the Location Bar symbol (arrow).

| 😻 Mozilla Firefox Start | Page × M Committed to you, your pr × + | |
|-------------------------|--|---|
| aboutconing | | 7 |
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| | | |

3. When you receive the "This might void your warranty" message, click I'll be careful, I promise!.

| This might void your warranty! | | | |
|--|--|--|--|
| Changing these advanced settings can be harmful to the stability, security, and performance of this application. You should only continue if you are sure of what you are doing. | | | |
| Show this warning next time | | | |
| I'll be careful, I promise! | | | |
| | | | |

4. On the **about:config** page, in the **Search** box, enter *tls* and wait for the list to populate.

| 😝 Mozilla Firefox Start Page 🗙 about:config × + | | | |
|---|----------------------------|---------|-------|
| Firefox about:config | | | ⊽ ℃ |
| Search: tls | | | |
| Preference Name | Status | Туре | Value |
| network.http.spdy.enforce-tls-profile | default | boolean | true |
| security.tls.version.max | default | integer | 3 |
| security.tls.version.min | default | integer | 0 |
| services.sync.prefs.sync.security.tls.version.max | default | boolean | true |
| services.sync.prefs.sync.security.tls.version.min | default | boolean | true |

- 5. Next, in the list, double-click **security.tls.version.min**.
- 6. In the Enter integer value window, in the security.tls.version.min box, type **1** to make TLS 1.0 the minimum required protocol version, and then click **OK**.

| Enter integer value | | | | |
|---------------------|--------------------------|--|--|--|
| ? | security.tls.version.min | | | |
| | 1 | | | |
| | OK Cancel | | | |

7. You have successfully disabled the SSL 3.0 protocol in your Firefox browser.

Google Chrome: How to Disable the SSL 3.0 Protocol

Google is currently testing a new version of Chrome in which the SSL 3.0 protocol support has been removed. If you don't want to wait for that version to come out, you can use these instructions to create a shortcut that allows you to open chrome with the SSL 3.0 support turned off, until the next version of Chrome is released.

Although these instructions and screenshots are for Google Chrome 38, they will work for other versions of Chrome.

1. Locate the Google Chrome shortcut; typically, this shortcut is on your desktop.

If you don't have a Google Chrome shortcut, create one.

i. Open the folder in which the Google Chrome application is located.

For example: C:\ProgramData\Microsoft\Windows\Start Menu\Programs\Google Chrome

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|-------------------------|----------------------------------|---|------------|
| File Home Share View | Manage Manage | | ~ ? |
| 🔄 🌛 🕤 🕆 📜 « ProgramDa | ta ▶ Microsoft ▶ Windows ▶ Sta | rt Menu → Programs → Google Chrome v 🖒 Search Googl | e Chrome 🔎 |
| 🔺 🚖 Favorites | Name | Date modified Type Size | |
| Desktop | 🔊 Google Chrome | 2014-10-15 01:52 Shortcut 3 KE | 3 |
| Downloads Recent places | | | |

ii. In the **Google Chrome** folder, right-click on the **Google Chrome** shortcut and then, click **Create shortcut**.

| 🗼 🗋 💭 💭 🛒 🀬 🦿 🗡 🕫 🚺 Shortcut Tools Application Tools Google Chrome — | | | × | | | | |
|--|-------------------------------|------------|-----------------------------|--------|-----|----------------------|-----|
| File Home Share View M | lanage Manage | | | | | | v 🕐 |
| 🔄 🏵 🕤 🛧 👢 « ProgramData 🕨 | Microsoft → Windows → Start M | 1enu ⊧ Pro | ograms ⊁ Google Chrome | | ~ Ċ | Search Google Chrome | Ą |
| ☆ Favorites | Name | | Date modified | Туре | | Size | |
| Desktop | 🔊 Google Chrome | | 2014-10-15 01:52 | Shortc | ut | 3 KB | |
| 🐌 Downloads | | | Open | | | | |
| 🐉 Recent places | | 0 | Open file location | | | | |
| | | | New window | | | | |
| 🌬 This PC | | V | Run as administrator | | | | |
| 📜 Desktop | | <u></u> | Open with jEdit | | | | |
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| Scal Disk (C:) | | | | | | | |
| Current (\\files\Public\Support) (Z:) | | 0 | Cut | | | | |
| - | | | сору | | | | |
| 🔍 Network | | | Create shortcut | | | | |
| K CWILLIAMSL1 | | V | Delete | | | | |
| | | V | Rename | | | | |
| | | | Properties | | | | |

iii. In the **Shortcut** window, click **Yes** to create a shortcut on your desktop.



2. Right-click on the **Google Chrome** shortcut and then, click **Properties**.



3. In the **Google Chrome Properties** window on the **Shortcut** tab, in the **Target** field, add the following line to the existing **Target**:



| 5 Google Chrome Properties | | | | | | | |
|----------------------------|---|--------------------------------------|--|--|--|--|--|
| Security | Details | Previous Versions | | | | | |
| General | Shortcut | Compatibility | | | | | |
| P Goog | Google Chrome | | | | | | |
| Target type: Ap | plication | | | | | | |
| Target location: Ap | plication | | | | | | |
| Target: m | e\Application\chrome.ex | æ" <mark>ssl-version-min=tls1</mark> | | | | | |
| Start in: | C:\Program Files (x86)\G | oogle\Chrome\Applicati | | | | | |
| Shortcut key: N | lone | | | | | | |
| Run: | lormal window | ~ | | | | | |
| Comment: A | ccess the Internet | | | | | | |
| Open File Loca | Open File Location Change Icon Advanced | | | | | | |
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| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | OK Cancel Apply | | | | | | |

- 4. Next, click **Apply** and then, click **OK**.
- 5. **From now on** (until Google releases the version of Chrome in which support fore the SSL 3.0 protocol is removed), to open Google Chrome, **you must use this shortcut**.

Whenever you use this shortcut to open Google Chrome, this instance of the Google Chrome browser will not support the SSL 3.0 protocol.

6. You have successfully disabled the SSL 3.0 protocol in your Chrome browser.