Enabling TLS 1.2 in Web Browsers and Java

July 2018

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1. Introduction

Transport Layer Security (TLS) secures the connection between your desktop or device and the websites you want to access. As part of our continued effort to adhere to the latest cybersecurity best practices, we are configuring CitiDirect BE® and CitiDirect® Services web servers to require that your browser and Java software use TLS version 1.2.

If you do not have TLS version 1.2 enabled within your web browser and Java software, you will not be able to login to CitiDirect BE and CitiDirect Services respectively. TLS versions 1.0 and 1.1 are being removed such that you need to make sure TLS 1.2 is enabled.

This document will guide you through the steps required to check/update/confirm that both your web browser settings and Java software settings are properly configured to support TLS 1.2.

If you need additional help, please contact your company’s Information Technology team or your Citi Service Representative.
2. Checking that your web browser is configured correctly.

Most modern browsers are automatically configured to use TLS 1.2 but, if you encounter a problem, use the steps below for your browser to ensure that it’s correctly configured.

**Internet Explorer:**
1. In Internet Explorer, click on “Tools” in the top menu bar of the IE browser
2. Click on “Internet Options”
3. Click on the “Advanced” tab within the Internet Options window
4. Scroll down in the “Advanced” tab and enable **“Use TLS 1.2”** Checkbox (if it not enabled already)
5. Click “Apply” in the Internet Options tab
For Internet Explorer, only IE 11.0 is recommended when using CitiDirect BE. **Any older IE versions run the risk of not supporting TLS 1.2.**

For example:
- IE7 or lower – TLS 1.2 is not supported (**you must upgrade** to IE11)
- IE8 to IE10 – users are strongly advised to check if TLS 1.2 is enabled
- IE11 – although TLS 1.2 should be enabled by default, users are encouraged to confirm that TLS 1.2 is enabled

**Firefox:**
1. In a new tab, type `about:config` in the address bar and press Enter/Return.
2. In the search box above the list, type **TLS**
3. If the `security.tls.version.max` preference is bolded and "user set" to a value other than 3, right-click > Reset the preference to restore the default value of 3
4. If the `security.tls.version.min` preference is bolded and "user set" to a value other than 1, right-click > Reset the preference to restore the default value of 1

The values for these preferences mean:
- 1 means TLS 1.0
- 2 means TLS 1.1
- 3 means TLS 1.2

**Firefox:**
- Firefox 23 or lower – TLS 1.2 is not supported (**you must upgrade**)
- Firefox 24 to Firefox 26 – users are strongly advised to check if TLS 1.2 is enabled
- Firefox 27+: although TLS 1.2 should be enabled by default, users are encouraged to confirm that TLS 1.2 is enabled

**Chrome:**
Chrome supports TLS 1.2 by default. No setting change is required

**Chrome:**
- Chrome 29 or lower – TLS 1.2 is not supported (**you must upgrade**)
- Chrome 30+: although TLS 1.2 should be enabled by default, users are encouraged to confirm that TLS 1.2 is enabled

**macOS Safari:**
Safari 7+ supports TLS 1.2 by default. No setting change is required
3. How to find the Java version on your computer?

The steps to enable TLS 1.2 for Java vary depending on the version of Java you have installed. To find the Java version currently installed on your computer, see the steps below for your Operating System.

**Windows 10:**
1. Click the Start button
2. Scroll through the applications and programs listed until you see the Java folder
3. Click on the Java folder, then About Java to see the Java version

**Windows 8:**
1. Right-click on the screen at bottom-left corner and choose the Control Panel from the pop-up menu
2. When the Control Panel appears, select Programs
3. Click Programs and Features
4. The installed Java version(s) are listed

**Windows 7:**
1. Click Start
2. Select Control Panel
3. Select Programs
4. Click Programs and Features
5. The installed Java version(s) are listed

**macOS**
1. From the Apple Menu, choose System Preferences and click on the Java icon. If you don't see the Java icon, you do not have Java installed
2. Click the Update tab at the top
4. What to do if your Java version does not have TLS 1.2 option?

When the Java Control Panel does not have TLS 1.2 option in the Advanced Security Settings, check your current Java version.

We highly recommend all clients to use “Java Platform 1.8”, which has higher level of cybersecurity protection (TLS 1.2) by default.

5. CitiDirect BE Mobile

All modern mobile browsers support TLS 1.2 by default.

However, some older mobile phones may require an upgrade to a more recent mobile browser version. When in doubt, please contact your IT Department or mobile phone providers for additional guidance and detailed instructions.

6. CitiDirect BE Tablet

No change is required.