

Configure TLS 1.2 as default secure Protocol On Windows Server 2008 R2 SP1

Let say you are running Exchange Server 2010 installed on Windows Server 2008 R2 SP1 x64(bit), and when you remotely open Outlook Web Access (OWA to the Exchange Server) in your Google Chrome web browser it alerts you that the installed SSL certificate is insecure. When you check the detail about the SSL certificate, the web browser is letting you know that the configured SSL protocols on the server are deprecated.

Get an SSL Report of your Web Server's TLS and SSL configuration

As the Administrator, you first run an SSL Test and analysis of your webserver using the Qualys SSL Labs' SSL test from here: <https://ssllabs.com/sslltest/> in order to analyze which Secure Socket Layer (SSL) and Transport Layer Security (TLS) protocols are available, enabled and/or set as default within the registry of your Server. Before inputting your server's web address to run these tests and to obtain a report, it is recommended for the sake of your webserver's privacy that you check the checkbox next to: "Do not show the results on the boards."

Update to enable TLS 1.1 and TLS 1.2 as default secure protocols in WinHTTP in Windows

This update provides support for Transport Layer Security (TLS) 1.1 and TLS 1.2 in Windows Server 2012, Windows 7 Service Pack 1 (SP1), and Windows Server 2008 R2 SP1.

To obtain the stand-alone package for this update, go to the Microsoft Update Catalog website here: <https://www.catalog.update.microsoft.com/search.aspx?q=kb3140245> and download and install the catalog update applicable to your server, such as "Update for Windows Server 2008 R2 x64 Edition (KB3140245).

Prerequisites for your server: To apply this update, you Windows Server 2008 R2 must have installed Service Pack 1 (SP1) for Windows 7 or Windows Server 2008 R2.

To understand why this update is or may be necessary, please review this Microsoft Support article: <https://support.microsoft.com/en-us/topic/update-to-enable-tls-1-1-and-tls-1-2-as-default-secure-protocols-in-winhttp-in-windows-c4bd73d2-31d7-761e-0178-11268bb10392>

Configuration Information for TLS 1.2.

See: <https://support.laserfiche.com/kb/1013919/configuration-information-for-tls-1-2> or

<https://support.laserfiche.com/kb/1013919/raw>

Before attempting to edit your Windows registry, **MAKE A BACKUP FILE OF YOUR REGISTRY.**

In order to open the Windows Registry in Windows Server 2008 R2 SP1, First click the Windows "Start" button, and in the Run box input 'regedit.exe' (without the single quote marks) and press the enter key on your keyboard.

At the top of the Window's registry tree, select "Computer" right click on "Computer" and left click "Export" and then supply a name to the registry backup file, and save this exported copy of your registry in a folder (directory) where in the future you can locate and import this registry backup if you happen to make a huge mistake while editing the Windows registry.

In the registry, browse to

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\SecurityProviders\SCHANNEL\Protocols

Create a new Key named **TLS 1.2**. How? Right click on the Protocols key, and left click on 'New' and left click on 'Key' and input the name of the new key as being TLS 1.2 and press enter or click on any white space to set the name of the key.

In the same manner, create two new subkeys each under the key named 'TLS 1.2' and name these new subkeys as **Client** and **Server** respectively.

In the Registry, browse to:

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\SecurityProviders\SCHANNEL\Protocols\TLS 1.2\Client and Create a new DWORD value named: **DisabledByDefault** and Set the value to: 0 (hexadecimal)

How? Right click on the **Client** subkey, and left click on new, DWord 32bit and name the Dword as 'DisabledByDefault' and click select DisabledByDefault and select 'Modify' and set the value as '0' in hexadecimal.

Also, under the 'Client' subkey, create a new DWORD value named: 'Enabled' and set the value to '1' (hexadecimal).

Now, in the Registry, browse to the new Server' subkey at:

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\SecurityProviders\SCHANNEL\Protocols\TLS 1.2\Server

In the same manner under the 'Server' subkey, create a new DWORD value named: 'DisabledByDefault' and set its value to: '0'

In the same manner under the 'Server' subkey, create a new DWORD value named: 'Enabled' and set its value to '1'

From:
<https://installconfig.com/> - Install Config Wiki

Permanent link:
https://installconfig.com/doku.php?id=configure_tls_1_2_default_secure_protocol_windows_server_2008_r2_sp1&rev=1633013315

Last update: 2021/09/30 14:48

