



TaurusTLS

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General Information

TaurusTLS is an attempt to make OpenSSL 1.1.1 and OpenSSL 3.x compatible support for Indy - Internet Direct. It provides headers for OpenSSL 1.1.1 and OpenSSL 3x plus two components for Delphi and C++Builder. Those components are:

	Component Name	Functionality
	TTaurusTLSIOHandlerSocket	enables TLS in a TIdTCPClientCustom descendant.
	TTaurusTLSServerIOHandler	enables TLS in a TIdCustomTCPServer descendant

Both components are in the TaurusTLS.pas unit and the components are available on the IDE palette page, “TaurusTLS”.

License

TaurusTLS is dual licensed. You can review which license better suits your needs, and use that license. You can even change your mind later if you have previously chosen one.

The TaurusTLS Modified BSD license is a very no nonsense license that allows you to do almost anything you want with TaurusTLS provided you provide proper attribution. Details are available in the Modified_BSD_LICENSE.md file included in the with this source-code.

To make it easier and consistent for JEDI users, we also offer an MPL license v1.1. Details are available in the LICENSE_MPL_1_1.txt file included with this source-code.

Deploying Your Applications

TaurusTLS does require OpenSSL 1.1.1 or OpenSSL 3.x. On MacOS and Linux, OpenSSL is usually installed by default. We recommend that developers document this requirement in case users need to install updated versions of OpenSSL.

On Windows, OpenSSL is not installed by default so you have to redistribute it along with your software. You can choose to either deploy OpenSSL 1.1.1 or an OpenSSL 3.x version. As of this writing, the 3.x versions are 3.0.15, 3.1.7, 3.2.3, 3.3.2, and 3.4.0. Pre-compiled .DLL's for these

versions are available at <https://github.com/JPeterMugaas/TaurusTLS/tree/main/OpenSSL-Binaries> .
For Win32 applications, you need to redistribute the following:

Cryptolib .library DLL	OpenSSL 1.1.1 libcrypto-1_1.dll	OpenSSL 3.x libcrypto-3.dll
SSL library DLL This requires the above Cryptolib .DLL.	libssl-1_1.dll	libssl-3.dll

OpenSSL program that provides openssl.exe
many OpenSSL capabilities on the
command line. I recommend that
developers install this so users can
use it to create Certificate
requests, Self-Signed Certificates,
and probably other things.

For Win64 applications, you need to redistribute the following:

Cryptolib .library DLL	OpenSSL 1.1.1 libcrypto-1_1-x64.dll	OpenSSL 3.x libcrypto-3-x64.dll
SSL library DLL This requires the above Cryptolib .DLL.	libssl-1_1-x64.dll	libssl-3-x64.dll

OpenSSL program that provides openssl.exe
many OpenSSL capabilities on the
command line. We recommend
that developers install this so
users can use it to create
Certificate requests, Self-Signed
Certificates, and probably other
things.

Demo Programs

Taurus TLS includes 2 demo programs.

\TaurusTLS\src\demos\FTPServer\TaurusFTPServer.dproj

This is a FTP Server with TLS enabled that runs in the Windows console. This program has been tested with the following FTP clients:

- WS_FTP Professional - <https://www.progress.com/resources/papers/ws-ftp-pro-data-sheet>
- SmartFTP - <https://www.smartftp.com/en-us/>
- WinSCP - <https://winscp.net/eng/index.php>
- FileZilla - <https://filezilla-project.org/>

This program requires a certificate to run. Instructions for creating a self-signed certificate are available at <https://www.baeldung.com/openssl-self-signed-cert> . You then need to create a server.ini file in the executable directory that enables the certificate that has the following lines:

```
[Certificate]
CertificateFile=[path to your public certificate file]
KeyFile=[path to your private SSL key]
```

Password=[password for your private SSL key]

TaurusTLS\demos\TaurusFTPClient\TaurusFTPClient.dproj

This is a fully-functional FTP client that is multi threaded using the VCL Framework. It has been tested with the following servers:

- CompleteFTP - <https://enterprisedt.com/products/completestftp/>
- RaidenFTPD - <https://www.raidenftpd.com/>
- Xlight FTP Server - <https://www.xlightftpd.com/>

No special configuration is required and the program generates it's own INI files for storing FTP server information and default settings. You may need to configure the program if you have a firewall/proxy setup or are behind a NAT and wish to use PORT transfers.

Credits

Tony Whyman

for providing the OpenSSL headers that TaurusTLS is based upon

Chad Z. Hower (Kudzu) and the Indy Pit Crew

author of the original code that was modified to create TaurusTLS.

Third Party Notices

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