# **Quantum Safe WireGuard VPN Lib List**

Version\_0.1

08/01/2021

Prepared by: Dr.XuJia, Dr.YiWen Gao, Yeo Shi Jing, LiuYuancheng

This document will show the list of all the third-party software/library/tools we are using in Quantum safe WireGuard VPN project. The official website, Wikipedia website entry and License detail for software will also be shown in this document.

#### 1. NTL (Key Exchange)

Lib Name	NTL
Version	11.3.2
Official Website	https://libntl.org/
Wikipedia Website	https://groups.google.com/u/0/g/libntl
Lib License	Open-source software distributed under the terms of the GNU Lesser
	General Public License (LGPL) version 2.1 or later.
Git Link	https://github.com/libntl/ntl

#### 2.GMP (Key Exchange)

Lib Name	GNU Multiple Precision Arithmetic Library
Version	MP 6.2.1
Official Website	https://gmplib.org/
Wikipedia Website	https://en.wikipedia.org/wiki/GNU_Multiple_Precision_Arithmetic_Library
Lib License	Dual licenses:
	GNU LGPL v3: https://www.gnu.org/licenses/old-licenses/gpl-2.0.html
	GNU GPL v2: https://www.gnu.org/licenses/old-licenses/gpl-2.0.html
Git Link	https://github.com/ryepdx/gmp

#### 3. GF2X (Key Exchange)

Lib Name	GF2X
Version	v1.3.0
Official Website	https://gitlab.inria.fr/gf2x/gf2x#the-gf2x-software-library
Wikipedia Website	N.A
Lib License	GNU LESSER GENERAL PUBLIC LICENSE Version 2.1
Git Link	https://gitlab.inria.fr/gf2x/gf2x/ or https://github.com/nesciens/gf2x

#### 4. mbedTLS (Key Exchange)

Lib Name	mbedTLS
Version	v2.16.4
Official Website	https://tls.mbed.org/
Wikipedia Website	https://en.wikipedia.org/wiki/Mbed_TLS
Lib License	open source under the Apache 2.0 license or the GPL 2.0 license. The
	Apache 2.0 license enables you to use mbed TLS in both open source and
	closed source projects.
Git Link	https://github.com/ARMmbed/mbedtls/releases

## 5. Glog (Key Exchange)

Lib Name	Google Logging Library
Version	v2.16.4
Official Website	https://github.com/google/glog
Wikipedia Website	https://github.com/google/glog/wiki
Lib License	Apache License Version 2.0, January 2004
	https://github.com/istio/glog/blob/master/LICENSE
Git Link	https://github.com/google/glog

## 6. XKCP(Key Exchange)

Lib Name	eXtended Keccak Code Package
Version	v2.0
Official Website	https://github.com/XKCP/XKCP
Wikipedia Website	N.A.
Lib License	BSD 3-clause license, GNU General Public License, CRYPTOGAMS license
Git Link	https://github.com/google/glog

## 7.OpenSSL(Key Exchange)

Lib Name	OpenSSL
Version	V3.0.0 Alpha9
Official Website	https://www.openssl.org/
Wikipedia Website	https://en.wikipedia.org/wiki/OpenSSL
Lib License	Apache License Version 2.0: https://www.openssl.org/source/apache-
	license-2.0.txt
Git Link	https://github.com/openssl/openssl

## 8. Wire Guard VPN (VPN function)

Lib Name	WireGuard VPN
Version	v1.0.20201112
Official Website	https://www.wireguard.com/
Wikipedia Website	https://en.wikipedia.org/wiki/WireGuard
Lib License	Kernel under the GPLv2, as is the Linux kernel itself. Other projects are
	licensed under MIT, BSD, Apache 2.0, or GPL, depending on context.
Git Link	https://github.com/openssl/openssl

## 9. wg(8) (VPN function)

Lib Name	wg(8) and wg-quick(8)
Version	v1.0.20200827
Official Website	https://git.zx2c4.com/wireguard-tools/about/
Wikipedia Website	https://en.wikipedia.org/wiki/WireGuard
Lib License	GNU GENERAL PUBLIC LICENSE Version 2: https://git.zx2c4.com/wireguard-
	tools/about/COPYING
Git Link	https://git.zx2c4.com/wireguard-tools