**WolfSSL vs GnuTLS**

**Initial Remarks**

WolfSSL and GnuTLS are both open-source cryptographic libraries that provide SSL/TLS and other cryptographic functionalities. Here are the key differences between WolfSSL and GnuTLS:

1. Codebase and Features: WolfSSL is designed to be a lightweight and efficient library suitable for resource-constrained environments such as embedded systems and IoT devices. It focuses on a small footprint, low memory usage, and fast performance. WolfSSL provides essential SSL/TLS functionality and supports various cryptographic algorithms. GnuTLS, on the other hand, is designed to provide a flexible and extensible TLS library. It offers a wide range of features, supports various cryptographic protocols, and provides support for advanced TLS features like SNI (Server Name Indication) and OCSP (Online Certificate Status Protocol).
2. Platform Support: WolfSSL and GnuTLS both support multiple platforms, including Linux, BSD, macOS, Windows, and embedded systems. However, WolfSSL has a strong emphasis on embedded systems and IoT devices and is optimized for these environments. It provides platform-specific optimizations and features tailored for resource-constrained devices.
3. Development and Community: WolfSSL is developed and maintained by the wolfSSL company, which provides commercial support and services around the library. It has its own community of users and contributors. GnuTLS is developed by a diverse community of contributors and supported by the Free Software Foundation (FSF). It has a broader community of users and contributors.
4. Licensing: WolfSSL is dual-licensed, offering both a GPLv2 license and commercial licensing options for proprietary use. GnuTLS is licensed under the GNU Lesser General Public License (LGPL), which is a copyleft license.
5. Industry Adoption: WolfSSL has gained significant adoption in the embedded systems and IoT community. It is widely used in these domains and integrated into various products and projects. GnuTLS is widely used in the Linux ecosystem and is included as the default SSL/TLS library in various Linux distributions. It is also used in other applications that prioritize open-source and free software.

When choosing between WolfSSL and GnuTLS, consider your specific requirements, platform support, licensing preferences, and the resource constraints of your target environment. If you are working on an embedded system or IoT project with limited resources and prioritize a lightweight and efficient library, WolfSSL may be a suitable choice. If you need a flexible TLS library with broad platform support and advanced features, GnuTLS might be a better fit.

**Testcase Directories:**

1. 20220421\_170936\_wolfssl-3.9.6-gnutls-3.5.0-dynamic-update-1\_tgt-0\_all
2. 20220421\_171224\_wolfssl-3.9.6-gnutls-3.5.0-dynamic-update-1\_tgt-1\_all
3. 20220511\_172646\_wolfssl-3.9.6-gnutls-3.5.0-dynamic-update-1-rank-1-14182\_tgt-0\_all
4. 20220511\_173038\_wolfssl-3.9.6-gnutls-3.5.0-dynamic-update-1-rank-1-14182\_tgt-1\_all
5. 20220511\_181015\_wolfssl-3.9.6-gnutls-3.5.0-dynamic-update-1-rank-2-82c43\_tgt-0\_all
6. 20220511\_181411\_wolfssl-3.9.6-gnutls-3.5.0-dynamic-update-1-rank-2-82c43\_tgt-1\_all