**WolfSSL vs MbedTLS**

**Initial Remarks**

WolfSSL and mbedTLS (formerly known as PolarSSL) are both open-source cryptographic libraries that provide SSL/TLS and other cryptographic functionalities. Here are the key differences between WolfSSL and mbedTLS:

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. mbedTLS, on the other hand, is designed specifically for embedded systems and IoT devices. It provides a comprehensive set of cryptographic functionalities, including SSL/TLS, cryptography algorithms, and protocols such as DTLS and IPsec. mbedTLS also includes support for X.509 certificates, PKI (Public Key Infrastructure), and cryptographic hardware acceleration.
2. Platform Support: Both WolfSSL and mbedTLS support multiple platforms, including Linux, BSD, macOS, Windows, and embedded systems. However, mbedTLS places a strong emphasis on embedded systems and IoT devices. It provides platform-specific optimizations and features tailored for these resource-constrained environments.
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. mbedTLS, on the other hand, is an independent project initiated by PolarSSL and later acquired by ARM (now owned by NXP Semiconductors). It is developed by a dedicated team at ARM/NXP and has its own community of users and contributors.
4. Licensing: WolfSSL is dual-licensed, offering both a GPLv2 license and commercial licensing options for proprietary use. mbedTLS is also dual-licensed, offering both an Apache License 2.0 and a GPLv2 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. mbedTLS, being specifically designed for embedded systems, has a strong presence in the embedded systems and IoT community as well.

When choosing between WolfSSL and mbedTLS, 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 comprehensive set of cryptographic functionalities specifically designed for embedded systems and IoT, mbedTLS might be a better fit.

**Testcase Directories:**

1. 20220421\_170851\_wolfssl-3.9.6-mbedtls-2.2.1-update-1\_tgt-0\_all
2. 20220421\_171051\_wolfssl-3.9.6-mbedtls-2.2.1-update-1\_tgt-1\_all
3. 20220511\_172604\_wolfssl-3.9.6-mbedtls-2.2.1-update-1-rank-1-860c5\_tgt-0\_all
4. 20220511\_172749\_wolfssl-3.9.6-mbedtls-2.2.1-update-1-rank-1-860c5\_tgt-1\_all
5. 20220511\_174047\_wolfssl-3.9.6-mbedtls-2.2.1-update-1-rank-2-954d7\_tgt-0\_all
6. 20220511\_174233\_wolfssl-3.9.6-mbedtls-2.2.1-update-1-rank-2-954d7\_tgt-1\_all