

KEY FEATURES AT A GLANCE

Open Source: Free to use, no royalties, and licensed under MIT, making it accessible for all developers.

Simple C Interface: Offers a straightforward, easy-to-implement C interface that minimizes ambiguity and enhances robustness.

Seamless Host Integration: Supports better automation, event handling, and host-plugin communication, with the host and plug-in on equal footing. Both have dedicated objects and can notify each other of unexpected behavior, improving reliability.

Polyphonic Modulation: Provides advanced support for per-note modulation and full MPE (MIDI Polyphonic Expression) integration.

Rapid Plugin Scanning: Significantly faster startup times for plug-ins, leading to smoother workflows for users.

Multi-Core Optimization: Leverages the power of modern CPUs with efficient multi-threading, improving performance.

Extensible and Modular: Designed to adapt easily to future audio developments, ensuring long-term scalability.

Quick Implementation: Developers have successfully added CLAP support within a few days or weeks, rather than the months typically required for such tasks.



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WHY CHOOSE CLAP?

1. Seamless Host-Plugin Communication

CLAP's transparent host / plug-in communication ensures that your plugin can safely interact with any CLAP-capable DAW. Clear threading requirements, a unified event list (MIDI, Parameters, Timing and more events in a single list), a C++ glue layer with optional error checking and extensive notifications between plug-in and host.

2. Advanced Parameter Modulation

CLAP offers native support for Parameter Modulation, a more powerful alternative to regular automation: Parameter Modulation's optional polyphony allows efficient per-note control over parameters. This level of granularity is ideal for maximizing expressivity, with modern features such as MPE (MIDI Polyphonic Expression). With CLAP, developers and users can push the boundaries like never before!

3. Multi-Core Processing

CLAP takes full advantage of today's multi-core processors. Its optimized multi-threading support dramatically improves performance by distributing the workload across multiple cores. The host can take care of CPU resource distribution, ensuring that everything will run even more efficiently: Better real-time performance, faster rendering, and more complex projects become possible.

4. Integrated Undo

The CLAP plug-in Undo extension enables smooth integration with the host's Undo system, ensuring a unified and consistent undo history. This makes using a CLAP plug-in feel as natural as e.g. Bitwig's native devices in terms of undo functionality. Additionally, this integration enhances crash recovery, making the process smoother and more reliable.

5. Supercharged Efficiency

No long waiting times: CLAP was designed for speed, providing rapid scanning and load times for hosts as well as plugins. It not only provides a better experience for end users, but also accelerates development: We heard from many developers how smooth the process of adding CLAP support turned out to be. CLAP provides a straightforward, easy-to-implement C interface that minimizes ambiguity and enhances robustness. It also enables CLAP development in any programming language.

6. The Freedom of Open Source

The MIT licensing model ensures that CLAP is highly permissive, with no risks of the license being withdrawn or not covering your use case. As an open-source, royalty-free standard, CLAP lets you freely integrate, modify, and distribute your plugins. This flexibility ensures you can focus entirely on creating innovative, world-class audio tools without legal restrictions.

7. It's a Wrap!

When you're finished developing a plug-in for CLAP, wrap it up: The CLAP wrapper project provides open source adapters which can transform any CLAP plug-in into any common plug-in format.

8. Modular and Future-Proof

CLAP's design is modular and extensible, making it easier to adapt to future developments in audio technology. As new features and capabilities emerge, CLAP is ready to grow with you, ensuring that your plugins remain competitive.

9. The CLAP Community

Collaborate with a growing community of developers who are actively helping shape CLAP for the next generation of audio technology. Whether you're looking to increase performance, offer radically novel features, or simply reduce your plugin development times, CLAP will adapt to give you the tools you need to make it happen.

10. Discover More

Visit CLAP's official website to learn about how easy it is to integrate this powerful format into your development pipeline. Together, let's take the next step in shaping the future of music production.

