

## Bullet Continuous Collision Detection and Physics Frequently Asked Questions (FAQ)

Q: Can Bullet be used commercially?

A: Yes. Bullet is free for commercial use and 100% open source.  
Please post on the forum if you use it.

Q: Does it inter-operate or compete with ODE?

A: It inter-operates. ODE can benefit from the collision detection features like GJK convex primitives and persistent manifold. Bullet can benefit from ODE, it can use the lcp solver, and from the ODE user community for its feedback.

Q: Does it compete with Havok, Novodex, Meqon, Solid?

A: No. Bullet is primarily meant for sharing knowledge and experience amongst self-sufficient physics developers and enthusiasts. Commercial libraries are preferable if you want professional support and platform specific optimizations.

Q: Can I contribute?

A: Yes, <http://www.continuousphysics.com/Bullet/phpBB2/index.php>

Q: Where does the software come from?

A: Author, Erwin Coumans, was previous Havok and Blender employee and the software is developed during spare time using public resources.

- Math classes are use with permission from Gino van den Bergen
- parts of the GJK simplex solver are from Christer Ericson's Realtime Collision Detection book
- Physics framework developed for Blender
- an iterative solver is taken from ODE.
- Screwing motion for algebraic time of impact from Stephane Redon

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