



What's the **difference** between Movelt and Movelt Studio?

Movelt is a popular open source framework in the ROS ecosystem that contains many advanced algorithms for robot arm motion planning, control, grasping, and computer vision. Movelt Studio is a developer tool and SDK that makes using Movelt much easier to use, more reliable to ship to production, and able to handle more advanced and unstructured environments.

Both of these products are developed and maintained by PickNik Robotics, but we believe building with Movelt Studio will save you from hiring 4+ engineers over the entire lifecycle of your robotics application. We've built the tooling that allows you to focus on building your end product and serving your customers. We like to give the analogy of Movelt Studio is to Movelt as Github is to Git.

	> Movelt	> Movelt Studio
Motion & Task Planning, Kinematics	✓	✓
Collision Checking and Grasping Algorithms	✓	✓
Dynamics Parameterization, Smoothing, and Controls Algorithms	✓	✓
Trajectory Visualization	✓	✓
Extensible and Customizable	✓	✓
Warranties and SLA	✗	✓
Support	✗	✓
Cross Platform, Browser Based	✗	✓
Behavior Tree Integration	✗	✓
Pre-Built Behavior Library for Motion Control	✗	✓
Model Based Design Architecture	✗	✓
Easy to Define Error Recovery and Fallback Behaviors	✗	✓
Visual Behavior Tree Editor and Real-time Visualizer	✗	✓
Browser-Based Visual Debugging and Introspection	✗	✓
Teach Pendant-like Functionality: Advanced Teleoperation & Recovery	✗	✓
Waypoint Based Planning and Editing	✗	✓
Cycle Time Profiler (Flamegraphs)	✗	✓
ML Based Grasping and Object Recognition	✗	✓
Online Admittance Control Tuning	✗	✓
Reachability Analysis Tools	✗	✓
Hand to Eye Calibration	✗	✓
Optional Cloud Integration	✗	✓