

ROS 2 (Robot Operating System) Middleware

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ROS 2 Reality

ROS 2 operates as dominant robotics middleware with substantial academic, commercial (NVIDIA Isaac integration, Open Robotics maintenance), and emerging defense customer engagement.

Cross-Vendor Robotics Composition Gap

Cross-vendor robotics operations face friction at vendor-specific ROS distribution boundaries; emerging EU AI Act robotics-AI provisions and emerging defense-robotics governance require architectural support.

Agent Schema Substrate

ROS nodes operate as credentialed agents; cross-vendor composition operates through declared admissibility.

ROS Ecosystem Position

ROS ecosystem gains regulatory-aligned architectural substrate.