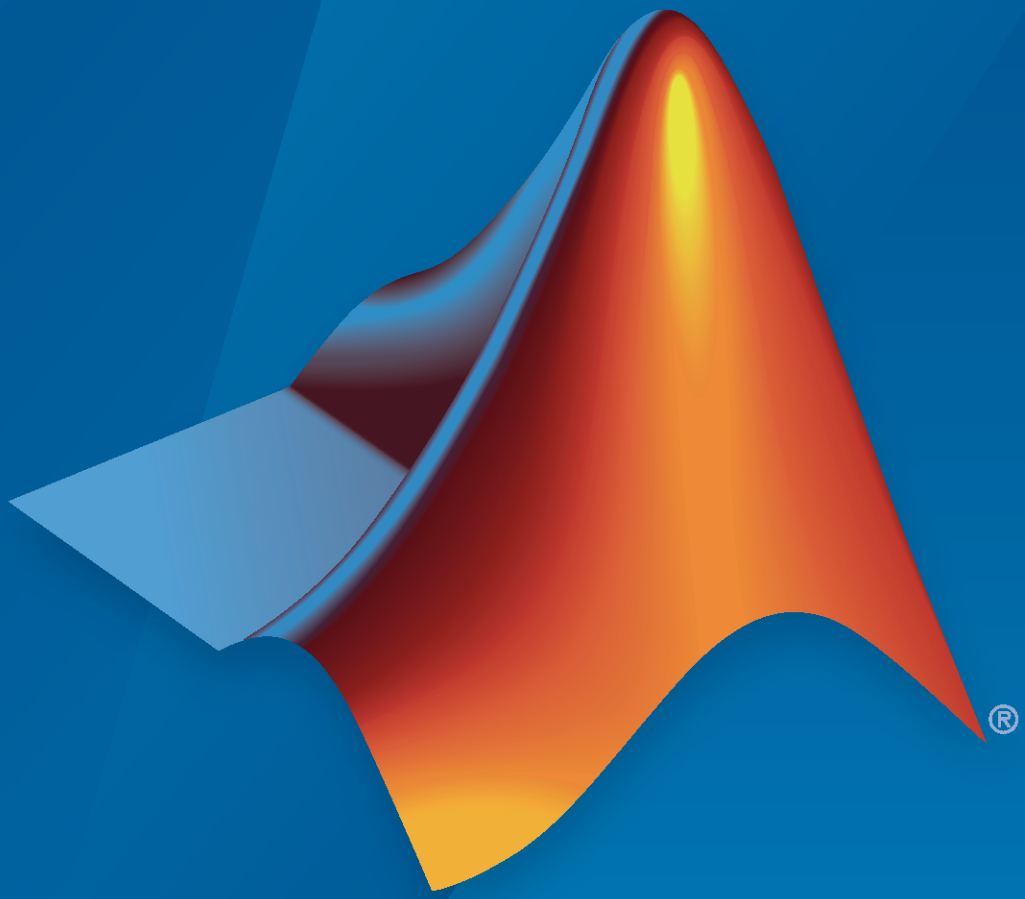
ROS Toolbox

Getting Started Guide



MATLAB® & SIMULINK®

R2022b

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Contents

1 Product Overview

1

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ROS Toolbox Product Description

Design, simulate, and deploy ROS-based applications

ROS Toolbox provides an interface connecting MATLAB® and Simulink® with the Robot Operating System (ROS and ROS 2), enabling you to create a network of ROS nodes. The toolbox includes MATLAB functions and Simulink blocks to import, analyze, and play back ROS data recorded in rosbag files. You can also connect to a live ROS network to access ROS messages.

The toolbox lets you verify ROS nodes via desktop simulation and by connecting to external robot simulators such as Gazebo. ROS Toolbox supports C++ code generation (with Simulink Coder™), enabling you to automatically generate ROS nodes from a Simulink model and deploy to simulated or physical hardware. Support for Simulink external mode lets you view messages and change parameters while your model is running on hardware.