ROSCon FR&DE 2025

WORKSHOPS

Workshop Title	ROS 2 Networking Redefined: Deep Dive into RMW Zenoh
Name of principal instructor	Julien Enoch / Phani Gangula (Zetta Scale)
Number of supplementary instructors	2
Maximum of participants	30
Language	English
Workshop duration	4h

Required material	* A laptop, preferably running Linux, but not mandatory
	* Software to install before the workshop:
	* Docker
	* Visual Studio Code with those extensions:
	  - devcontainer: https://marketplace.visualstudio.com/items?itemName=ms-vscode-remote.remote-containers
	  - ros2env: https://marketplace.visualstudio.com/items?itemName=SakshayMahna.ros2env

Skills required for participants	Beginners

Brief description	RMW Zenoh has been launched as a Tier 1 solution across all supported ROS 2 distributions, offering an alternative to DDS middlewares.
	Its deployment and setup differ somewhat from DDS-based RMWs. In this workshop, we will explore these differences and provide comprehensive insights into configuring RMW Zenoh for various scenarios, including intra-robot and extra-robot communications, constrained networks such as WiFi or 4G/5G, Internet connectivity, and leveraging SROS for security measures such as authentication and access control.
	Participants will gain hands-on experience and leave with a robust understanding of how to implement and optimize RMW Zenoh in their ROS 2 projects. All you need to attend is a laptop with Docker and Visual Studio Code.