
all-docs Documentation

Release 1.0

Miguel Barro

Apr 16, 2020

Contents

1	eProsima Fast RTPS	3
2	eProsima Shape Demo	5
3	eProsima Micro XRCE-DDS	7
4	eProsima Integration Services	9
5	eProsima RPC over DDS	11
6	eProsima Fast Buffers	13
7	eProsima Non-Intrusive DDS Recorder	15
8	eProsima Dynamic Fast Buffers	17
9	eProsima Discovery Server	19

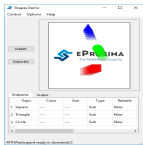
eProsima is focused in networking middleware and tools for high performance distributed systems and our products are customer driven. Over the years we have excelled in several areas of expertise: Low latency, high throughput, small footprint, low bandwidth consumption, optimum protocol, low cpu use, etc working under very different scenarios, from high-performance systems with high speed reliable links, to small devices connected over unreliable radio links.



CHAPTER 1

eProsima Fast RTPS

eProsima Fast RTPS is a high performance publish subscribe framework to share data in distributed systems using a decoupled model based on Publishers, Subscribers, and Data Topics.



CHAPTER 2

eProxima Shape Demo

Shapes Demo is an application that Publishes and Subscribes to shapes of different colors and sizes moving on a board. Each Shape conforms its own topic: Square, Triangle or Circle. A single instance of the Shapes Demo can publish on or subscribe to several topics at a time.



eProxima Micro XRCE-DDS

eProxima Micro XRCE-DDS implements **DDS-XRCE protocol** specified in the DDS for *eXtremely Resource Constrained Environments* proposal submitted to the **Object Management Group (OMG)** consortium.



CHAPTER 4

eProsima Integration Services

eProsima Integration Service is a library based on [Fast RTPS](#) for creating parameterized communication bridges between different systems, services, and protocols. It is also able to perform transformations over the over the messages such as customized routing and mapping.



CHAPTER 5

eProsima RPC over DDS

eProsima RPC over DDS is a high performance remote procedure call (RPC) framework. It combines a software stack with a code generation engine to build services that work efficiently in several platforms and programming languages.



eProsima Fast Buffers

eProsima Fast Buffers is an **open source serialization engine optimized for performance**, beating alternatives such as Apache Thrift and Google Protocol Buffers in both Simple and Complex Structures.



eProxima Non-Intrusive DDS Recorder

eProxima Non-intrusive DDS Recorder is a tool to record all the DDS traffic in your network, using a non-intrusive mechanism allowing you to test, analyze or log your DDS distributed system without adding any new DDS participant or service, ensuring you are recording the real behavior and timing.



eProsimia Dynamic Fast Buffers

eProsimia Dynamic Fast Buffers is an **open source high-performance serialization library** using a different approach to the traditional serialization frameworks. Data types are defined through a friendly API directly in your application code, and the serialization support is generated at runtime.



eProsima Discovery Server

eProsima Discovery Server is an application that simplifies the use and testing of the new [Fast RTPS](#) discovery capabilities. Now Fast RTPS allows a centralized, non-standard, client-server discovery mechanism that:

- extends Fast RTPS use to non-unicast network transports like TCP.
- speeds up the discovery-stage in a large number of participants scenarios.