

Angelo Corsaro, Ph.D.

Chief Technology Officer

PrismTech

OMG DDS SIG Co-Chair

angelo.corsaro@prismtech.com

Sam Mancarella

Chief Technology Officer

SPARX SYSTEMS

sam.mancarella@sparxsystems.com.au

OpenSplice|DDS

Delivering Performance, Openness, and Freedom

SPARX
SYSTEMS

 **PRISMTECH**

Powering Netcentricity

Power Tools

Pre-Requisites

- ▶ All the software demonstrated during this Webcast can be obtained at the following web-sites:

- ▶ <http://www.opensplice.org>

- ▶ <http://www.sparxsystems.com>

Full OMG DDS Implementation. Fully Open Source!

OpenSplice Community Edition has no equal in terms of standards compliance and openness.

	OMG DDS Standard Compliance					
	DCPS Profiles				DLRL	DDS/RTPS
	Minimum	Content	Ownership	Durability		
OpenSplice DDS Community Edition	Yes	Yes	Yes	Yes	No	Yes
Other DDS (Best Case)	Yes	Partial	Yes	No*	No	Yes

What is the right OpenSplice DDS Edition for you?

OpenSplice DDS is available in four different editions, whose features are summarized below.

Edition	Good to Know	Action
OpenSplice DDS Community Edition	<ul style="list-style-type: none">• Freely available at no cost• Open Source under LGPL License• Full DDS Implementation• Interoperability Wire Protocol (DDS/RTPS)• Real-time Networking• CORBA Co-habitation• More Features than any other DDS Implementation	Download
OpenSplice DDS Compact Edition	<i>All features included in the Community Edition plus</i> <ul style="list-style-type: none">• Eclipse-based Model Driven Tools, to improve your productivity up to 10x• Rich set of Tools for inspecting your DDS applications• Available via PrismTech through Commercial Subscriptions	Learn More 30-Day Trial
OpenSplice DDS Professional Edition	<i>All features included in the Compact Edition plus</i> <ul style="list-style-type: none">• Full implementation of the OMG DDS-DLRL Standard to natively integrate DDS into C++ and Java• Web connectors• Available via PrismTech through Commercial Subscriptions	Learn More 30-Day Trial
OpenSplice DDS Enterprise Edition	<i>All features included in the Professional Edition plus</i> <ul style="list-style-type: none">• Secure DDS Extension• Connector to any ODBC 3.0 DBMS (e.g. MySQL, Oracle, etc.)	Learn More 30-Day Trial

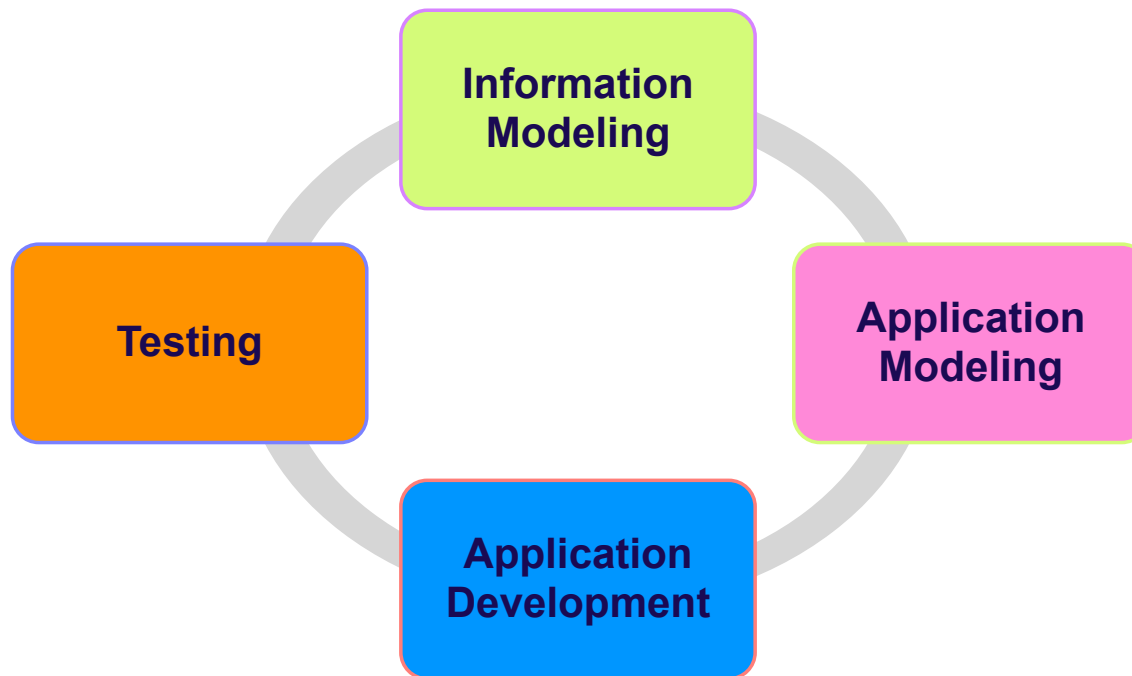


OpenSplice|DDS

Delivering Performance, Openness, and Freedom

Building DDS Applications

Building DDS Applications



- ▶ Tools can be applied at various stages of system development
- ▶ Different Tools and Modeling approaches are more suitable for the different stages



OpenSplice|DDS

Delivering Performance, Openness, and Freedom

Relevant Standards

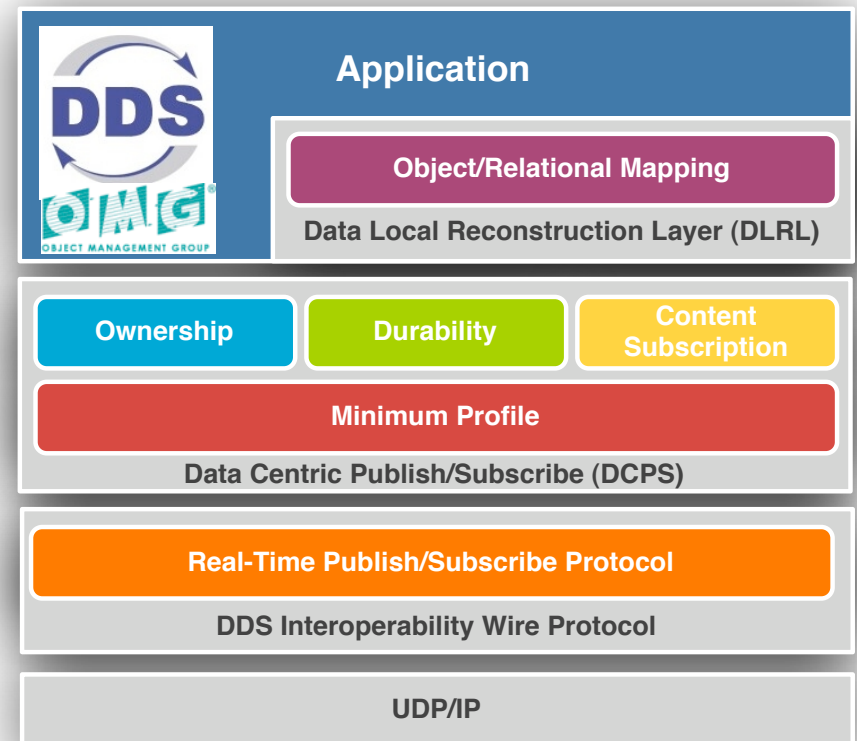
The OMG Data Distribution Service (DDS)

DDS v1.2 API Standard

- ▶ Language Independent, OS and HW architecture independent
- ▶ **DCPS**. Standard API for Data-Centric, Topic-Based, Real-Time Publish/Subscribe
- ▶ **DLRL**. Standard API for creating Object Views out of collection of Topics

DDSI/RTPS v2.1 Wire Protocol Standard

- ▶ Standard wire protocol allowing interoperability between different implementations of the DDS standard
- ▶ Interoperability demonstrated among key DDS vendors in March 2009



UML Profile for DDS

- ▶ A UML Profile designed for the analysis and design of object-oriented systems using Data Distribution Service technology.
- ▶ Provides DDS designers, architects and practitioners with a standard, domain-specific modeling language to design DDS-based distributed information systems in a manner not specific to the underlying implementation of that design.



OpenSplice|DDS

Delivering Performance, Openness, and Freedom

Building a DDS Application in Action

Building DDS Applications



Information
Modeling



Application
Modeling

Testing

Application
Development

OpenSplice|DDS

OpenSplice|DDS

OpenSplice|DDS

© 2009, PrismTech. All Rights Reserved





OpenSplice|DDS

Delivering Performance, Openness, and Freedom

Let's go live!

Online Resources

OpenSplice|DDS

Delivering Performance, Openness, and Freedom

* <http://www.opensplice.com/>

* [emailto:opensplicedds@prismtech.com](mailto:opensplicedds@prismtech.com)



* <http://bit.ly/1Sreg>



* <http://www.youtube.com/OpenSpliceTube>

SPARX
SYSTEMS

* <http://www.sparxsystems.com/>



* <http://www.slideshare.net/angelo.corsaro>



* <http://opensplice.blogspot.com>

OpenSplice|DDS

© 2009, PrismTech. All Rights Reserved

 **PRISMTECH**