Multi-Agent Oriented Programming – Overview –

The JaCaMo Multi-Agent Programming Platform

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Outline

1 Origins and Fundamentals
2 MAOP Perspective: JaCaMo Platform

How do we go to MAOP?

A+E+O meta-model

Which platform, Which Programming Environment?

Based on A&A [Omicini et al., 2008], Jason, Moise meta-models
Origins and Fundamentals

MAOP Perspective: JaCaMo Platform

- Agent: Jason agents [Bordini et al., 2007]
- Environment: CArtAgO platform [Ricci et al., 2009]
- Organization: based on an extended/refactored version of the MOISE Framework
- Seamless Integration in the JaCaMo platform with dedicated bridges for
  - A–E (c4Jason, c4Jadex [Ricci et al., 2009])
  - E–O (count-as/enact rules [Piunti et al., 2009])
  - A–O (J-Moise\textsuperscript{+} [Hübner et al., 2007] Action/Perception Moise\textsuperscript{+} organizational events and actions integration within Jason)
Unifying agents, environments and organisation perspectives
- Volcano platform [Ricordel and Demazeau, 2002]
- MASK platform [Occello et al., 2004]
- MASQ [Stratulat et al., 2009], extending AGRE and AGREEN
- Embodied organisations [Piunti, 2010]
- Situated E-Institutions [Campos et al., 2009]

Normative programming and infrastructures [Hübner et al., 2009, Tinnemeier et al., 2009, Dastani et al., 2009]
Application Example with JaCaMo: RoomBooking Management (2)

Bibliography I


Bibliography II


Bibliography III


