

# Strong Programming Model for Strong Weak Mobility: The ProActive Parallel Suite

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## Abstract

ProActive [2] is a Java library (Source code under GPL license) for parallel, distributed, and concurrent computing, also featuring mobility and security in a uniform framework. ProActive aimed at simplifying the programming of applications that are distributed on Local Area Network (LAN), on cluster of workstations, or large scale Grids. ProActive promotes a strong NoC approach, Network On Ship, to cope seamlessly with both distributed and shared-memory multi-core machines. A theoretical foundation ensures constant behavior, whatever the environment.

ProActive features location tracking of moving objects, together with a strong programming model that makes it very suitable for global computing infrastructure.

Interactive and graphical GUI of the ProActive Parallel Suite will also be presented during the talk.

## Acknowledgements

ProActive research and developments are conducted with all the great researchers and developers from the OASIS Team [3], University of Nice-Sophia Antipolis, INRIA, CNRS-I3S.

## Biography

Denis Caromel is full professor at University of Nice-Sophia Antipolis and CNRS-INRIA. He is also member of the Institut Universitaire de France (IUF), a multidisciplinary national academia that select a few professors based on the excellence of their research records. His research interests include parallel, concurrent, and distributed object-oriented programming. He has published more than 70 scientific papers in referred international journals and conferences, and edited 5 volumes

of Lecture Notes. In 2005 he published a monograph, *A Theory of Distributed Objects*. He gave many invited talks on Object, concurrency, and Distributed Computing at various universities around the world (including Jet Propulsion Laboratory, Berkeley, Stanford, Harvard Medical School, ISI, USC, Electrotechnical Laboratory Tsukuba, Univ. of Sydney, Univ. of Adelaide, Univ. Federal de Rio, University College London, European Science Foundation). He was also an invited visiting scientist at various universities and research institutions (including Digital System Research Center in Palo Alto, NASA Langley Research Center in Hampton, Virginia, and IBM Tom Watson). He serve(s/d) many academic conferences, at various positions (Conference Chair, Program Committee Chair, Organizer Chair, Tutorials Chair).

He recently created the startup ActiveEon [4], dedicated to Parallel, Distributed, and Grid Computing.

## References

- [1] D. Caromel and L. Henrio. *A Theory of Distributed Objects*. Springer, 2005. <http://www-sop.inria.fr/oasis/Denis.Caromel/TDO/>
- [2] <http://proactive.inria.fr/>
- [3] <http://www-sop.inria.fr/oasis/>
- [4] <http://www.ActiveEon.com>