



Press release

Paris, November 17, 2005

Scientific Computation

INRIA, host of the Scilab Consortium, National Instruments, Mathsoft and Maplesoft create the Numerical Mathematics Consortium and provide the foundations for a new generation of scientific software.

INRIA, Maplesoft, Mathsoft and National Instruments created the "Numerical Mathematics Consortium" (NMC). These mathematical software publishers as well as individuals from industry and academia are collaborating to define a consistent and manageable foundation for numerical mathematics.

The initial objective of the "Numerical Mathematics Consortium" is to create an open mathematical semantics standard for numerical algorithm development to enable portability and reuse among tools, platforms and disciplines.

The Numerical Mathematics Consortium's objective is to create a specification that stipulates core mathematical function definitions and semantics applicable to numeric algorithms. These algorithms can then be implemented in a wide variety of application areas such as industrial control, embedded design and scientific research, as well as be easily shared among researchers and developers in industry and academia.

Numerical calculation, simulation and control as well as embedded design are major disciplines for industry and research. In these fields, incompatibility, unfortunately, prevails in a chronic way because, nowadays, semantics of mathematical functions can vary considerably from one software to another. Each tool proposes its own set of functions, and it is often necessary to rewrite the precious algorithms at the time of new projects or when new technologies are implemented. A standard set of mathematical functions based on common semantics will allow both portable solutions and ready-to-use libraries and tools under numerous environments. The technological, scientific and financial stakes are thus more than significant.

INRIA brings a proven know-how in this field, thanks to Scilab, a free open source numerical computation software produced by the Scilab Consortium hosted by the Institute. The software which is downloaded, each month, by more than 15,000 new users in the world, meets a growing success.

The founding members of the "Numerical Mathematics Consortium" invite companies, research centres, universities and individuals who wish to take an active role in standardizing numerical mathematics to join the Consortium.

All information on this subject is available at www.nmconsortium.org.

About the NMC

The NMC (Numerical Mathematics Consortium) is a non-profit organization comprising vendors and individuals in industry and academia committed to establishing an open mathematical semantics standard for numerical algorithm development.

Focused on reducing the overall cost of numerical algorithm development and reuse in different disciplines, the Numerical Mathematics Consortium is committed to ensuring algorithm portability through standardizing core mathematical definitions, algorithm interchangeability and function semantics.

The NMC charter document, the identity of the founder members and the references of the members are available at www.nmconsortium.org where companies, research centres, universities and individuals interested in taking an active role in standardizing numerical mathematics will find all information on joining the consortium.

www.nmconsortium.org

About Scilab and the Scilab Consortium

Developed originally by INRIA and ENPC, the Scilab software is, since May 2003, produced by a consortium, managed by INRIA, which, to date, has 19* industrial companies, European research centres and "Grandes Ecoles" as members.

The creation of the Scilab Consortium reflects an asserted will to have a European "Open Source" numerical computation software of high quality.

Scilab is developed by a dedicated and permanent team hosted by INRIA. Moreover, its Open Source nature allows external contributions and thus a level of know-how in the field of the scientific computation can be reached, which a single company can claim with difficulty. Every user can adapt the software to his/her needs. The code being open, an optimization of the use is always possible.

More than 15,000 remote downloads of the Scilab software are carried out each month from the official site of the Consortium to the profit of companies, universities and research centres, European as well as foreign. The number of members of the Scilab Consortium is in constant growth.

* Anagram Technologies, Appedge, AXS Ingénierie, Cril Technology, CEA, CNES, Dassault-Aviation, EADS, Ecole Polytechnique, EDF, ENPC, Esterel Technologies, IFP, INRIA, Klippel, PSA, Renault, Thalès, TNI.

www.scilab.org

About INRIA

INRIA, the National Institute for Research in Computer Science and Control, is dedicated to fundamental and applied research in information and communication science and technology (ICST). INRIA welcomes, in six research units implanted in seven major regions *, 3500 persons, 2700 of whom are scientists (from INRIA and associated organizations). INRIA has an annual budget of 135 million euros, 20% of which comes from its own research contracts and development products.

INRIA plays a key role in five fields of research: systems communicating, cognitive, symbolic systems, numerical and biological. INRIA develops many partnerships with industry and fosters technology transfer and company foundations (close to 80) in the field of ICST, in particular through its INRIA-Transfer subsidiary, promoter of four start-up funds.

International collaborations appear by the reception and the recruitment of foreign students as well as by significant exchanges between researchers. The priority is given to the geographic zones with strong economic potential: European research area, Asia and North America while maintaining a thorough activity with South America, Africa and the Middle East.

* Aquitaine, Bretagne, Lorraine, Ile-de-France, Nord Pas de Calais, Provence Alpes Côte d'Azur and Rhône-Alpes.

www.inria.fr

To know more about it:

www.NMConsortium.org

www.scilab.org

www.inria.fr

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High definition picture: www.scilab.org/events/NMC_illustration.zip

