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NEWS: Version 6.0 of *MATHEMATICA*

Wolfram Research, Inc. – Press Release

Wolfram Reinvents Mathematica(R)
A Dramatic New Product Nearly 20 Years after the Original
Champaign, Illinois, May 1, 2007

For the second time in under 20 years, Wolfram Research is bringing a revolution to computing. The first was Mathematica 1.0 in 1988. Today's is Mathematica 6.0 in many respects a completely new product, one with several hundred groundbreaking technologies developed over more than a decade at Wolfram Research.

"In compatibility terms, Mathematica 6 is an upgrade. In capability terms, this is a major new product," said CEO Stephen Wolfram. "Mathematica's been reinvented."

Mathematica 6 takes technical computing to a new level: more tightly bound, more natural, and more automated, applicable to a far wider range of areas than ever before. Central to this achievement is "instant interactivity" – taking models, simulations, computations, or just about any concepts and turning them into fully interactive applications, sometimes within seconds. This new way of working drastically improves innovation – the process of transforming ideas into highly optimized results.

"In 1988, Mathematica transformed scientific computing from something you hire a programmer to do into something you can just do yourself. In 2007, we are doing the same for live interactive interface creation," said Theodore Gray, director of user interface technology. "No other system comes close to providing this kind of nimble, fluid environment for creating dynamic interactive interfaces, which, because of the underlying power of Mathematica, often turn out to have astonishing depth and variety."

Over 1000 examples of these interactive capabilities have already been posted to The Wolfram Demonstrations Project (demonstrations.wolfram.com).
It's not just for instant development that Mathematica 6 is newly optimized. The integrated development environment (IDE), allied to Mathematica's advanced programming language and world-leading computational capabilities, makes it ideal for the opposite end of the spectrum – infrastructure development – and everything in between.
"It's a unique facet of Mathematica 6 that it's so appropriate at all scales: from one-off mini-applications through large-scale infrastructure projects," said Tom Wickham-Jones, director of kernel technology. "Whenever you think of doing technical development, think of Mathematica 6."
"These days, the main hurdle to using Mathematica in technical work is thinking of using it–its scope is wider than almost anyone imagines," added Conrad Wolfram, director of strategic and international development.
Nearly a thousand new computational and interface features enhance Mathematica 6's revolutionary new approach. Several of these would individually classify Version 6 as a major release, and some broaden Mathematica to encompass the capabilities of whole competing products.

Key new features include:

* Dynamic interactivity, allowing sophisticated interactive interfaces to be created from single lines of input
* High-impact adaptive visualization for the automated creation of high-fidelity function and data graphics
* Language for data integration, including automatic integration of hundreds of standard data formats
* Load-on-demand curated data for math, physics, chemistry, finance, geography, linguistics, and more
* Symbolic interface construction for the immediate creation of arbitrary interfaces from simple programs
* Automated computational aesthetics, with algorithmic optimization for visual presentation
* Unification of active graphics and controls into flowing text and input.

Mathematica 6 also introduces hundreds of other capabilities and enhancements for: * Integrated geometric computing * Fully automated graph layout * Combinatorial optimization * Constrained nonlinear optimization * New-generation numerical integration * New classes of special functions

* Extended number theory support * Equational theorem proving * Exploratory data analysis * Symbolic statistical computing * High-level string computation * Extended array operations * Symbolic sound support * Dynamic graphical input * Integrated graphics editing and drawing * Real-time 3D graphics * Built-in gamepad and HID support * 3D printing and scanning support * Instant multimedia programming * Streamlined presentation * Automated table layout * Symbolic report generation * Real-time code annotation * Instant high-level debugging * Extensive in-product and web-based documentation

"We've built the highest base of functionality consistently across all technical areas – quite a different concept than our competitors'," said Roger Germundsson, director of research and development. "They make spikes of specialist functionality which might work if your needs sit on a spike, but miss completely if you have to do something just a little different, new, or innovative."
"We thought about renaming Mathematica altogether," said Stephen Wolfram. "It's that new. But we decided instead to highlight the ongoing importance of its original symbolic architecture by just calling it Mathematica 6."

Availability and Background

Mathematica 6 is available for Windows NT/2000/XP/Vista, Mac OS X, Linux x86/Itanium, Solaris UltraSPARC/x86, HP-UX, IBM AIX, and compatible systems. The suggested commercial price is USD 2495 in the United States and Canada and includes one year of Premier Service. International prices may vary. Academic and volume discounts are available. Existing Premier Service customers are eligible for a complimentary upgrade.

More product details are available at
http://www.wolfram.com/mathematica

Wolfram Research is the world's leading developer of computational software for science and technology, offering organization-wide computing solutions. Led by Mathematica, its flagship product, the company's software is relied on today by several million enthusiastic users around the world and has been the recipient of many industry awards. Wolfram Research was founded in 1987 by Stephen Wolfram, who continues to lead the company today.

The company is headquartered in the United States, with offices in Europe and Japan. Go to http://www.wolfram.com for more information about Wolfram Research and its products.

Dear colleagues and friends!

WRI made huge jump in the building new computing opportunities - it is Version 6 of Mathematica. Now, looking on this system after 16 years of my work in WRI, I feel myself like a Neanderthaloid near space ship - SO MANY FANTASTICAL THINGS were realized already or matched for nearest future.

I ask you to read above press release about Mathematica 6 and send it to corresponding contact people. Also I invite you to change (or fix a little) old fashion approach to computer systems and try to use Mathematica. You will become really happy and will not be able to make research without Mathematica any more.

With best wishes,

Oleg Marichev

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