ledas

LEDAS announces Flash-LGS - an on-line LGS geometric solver technology demonstrator.

LEDAS Ltd. (www.ledas.com), an independent software provider of computational components for PLM and ERP, presents Flash LGS – an online technology demonstrator of LGS computational engine for parametric design systems. The on-line demonstrator has simple intuitive user interface and provides an interactive access to functionality of LGS 2D solver, which is widely used in the development of two-dimensional drafting and sketching applications, vector graphics systems and geometric data exchange tools.

Flash LGS purpose is to show flexibility and affordability of LGS parametric computational engine in wide sense: from simplicity of solver incorporation into your applications and efficiency running them on wide range of hardware to LEDAS openness for collaboration with wide range of graphics software developers, product vendors, research and educational organizations.

Traditionally parametric graphics design is area of heavy CAD applications. LEDAS supposes much wider opportunities, virtually any 2D graphics applications: light and custom in-house CAD/CAM solutions, technical illustration tools, web-design, interactive presentation and animation applications.

First of all, our demonstration is directly targeted at numerous Flash developers, who create different geometry-rich web-applications. LGS can be used in such applications even when no interaction with users is needed: creating a model with objects and constraints allows to show animation generated on the fly which at the same time reflects internal properties of an animation subject: trajectories for the movements of the subject's parts (including rather complex ones) will be computed strictly in accordance with the constraints (connections, sizes, etc.) applied. LGS would also help interacting with such an applet: for instance, a subject can respond to a mouse click by changing its movement, remaining, however internally consistent.

In currently available CAD systems variational design is already widely used. But its applicability is still mostly limited by the boundaries of an engineer's workstation. Collaborative design tools are now presented in almost every CAD system, but these tools are mostly focused on interaction between participants rather than cooperative design. Bringing LGS to the web is a first step to create a truly collaborative and cooperative design, where within one session all parties can impose their constraints and see how they affect the final design.

Three areas outlined above give some ideas of what you may see through the simple demo presented by LEDAS. Every specialist in development of geometry-rich software would see plenty of different opportunities to apply LGS in various kind of systems both on-line and off-line.

The system is organized as a client-server solution, so all computations are performed on LEDAS server side, while the on-line demonstrator interface is based on Adobe Flash engine. To run Flash LGS only you need is web-browser that supports Flash player. Therefore it can be run on any platform, which provides suitable Internet-browser: desktop or notebook PC, running any OS, pocket computer. User client performs as simple 2D editor. It allows to draw and amend basic geometry shapes, apply to them wide range of constrains and, so far create parametric sketches, amend them and promptly recalculate geometry according to settled parameters. The list of allowed constrains provides over dozen possible conditions, including nodes coincidence, circles coaxiality, parallel and perpendicular lines, angles fixation and many more. Once created sketch can be stored on server and loaded back at any time.

Flash LGS by its nature shows that application developer does not need to be an graphics or math expert to be able developing parametric graphics software. Flash LGS itself is practical proof of LGS technological affordability. In this particular case the only skills required are knowledge of web-programming and Flash technology itself.

If you become interested in this technology – there's next step to deeper evaluation of Flash LGS solution, available on www.ledas.com/products/lgs2d/flash_lgs/, which give you an opportunity to learn LGS API, access code samples, create own applications. You will see, that parametric graphics design never been so easy to get in! Our team is ready to help you – just contact us regarding any your questions.

LGS is trademark of LEDAS Ltd. Flash is registered trademark of Adobe Inc.

About LEDAS

LEDAS Ltd. is an independent software company founded in 1999; it is based in Novosibirsk Scientific Centre (*Akademgorodok*), Siberian Branch of the Russian Academy of Science. A leader in constraint-based technologies, LEDAS is a well-known provider of PLM components: geometric constraint solvers for CAD/CAM/CAE, optimization engines for Project Management, Work Scheduling and Meeting Planning as well as interval technologies for Knowledge-Based Engineering and Collaborative Design. The company also provides services for PLM and ERP markets: software development, consulting, reselling as well as education and training. Detailed information about LEDAS is available on the Internet at: www.ledas.com.

Contact

Sales and Marketing Department
LEDAS

Phone: +7 383 3356 504
fax: +7 383 3356 256

email: info@ledas.com