Press Release

CMLabs enhances productivity of its leading ground vehicle, robotics and heavy equipment simulation toolkit by adding the Vortex editor.

Vortex 5.1 enhances productivity, performance and fidelity for developers of ground vehicle, robotics and heavy equipment simulations, delivering the easiest to use and integrate ground vehicle dynamics available on the market.

November 28, 2011, Montreal, Canada – CMLabs Simulation (www.vxsim.com), the global innovator of dynamics software and simulation-based training solutions, announced today the release of a major new version of its Vortex simulation toolkit. Vortex 5.1 allows developers to integrate real-time mechanical behaviour into interactive 3D simulations, creating realistic dynamics for vehicles, heavy equipment, robotics and more. Vortex is used in hundreds of training, engineering and scientific projects to simulate complex machines and equipment, train operators, rehearse operations, and design and test vehicles. CMLabs will present Vortex 5.1 and its new capabilities at the Inter-service/Industry Training, Simulation and Education Conference (I/ITSEC) in Orlando, FL from November 28 to December 1 at Booth 2956.

Vortex 5.1 has been designed and developed with a focus on ease-of-use and accelerating the user's ability to integrate high-fidelity simulation of complex vehicles and robotics into training applications.

"We are very excited to deliver Vortex 5.1, based on feedback from our customers, Vortex is evolving towards a modular and easy-to-use high-fidelity dynamics simulation studio", said Robert Weldon, CEO at CM Labs, "and the perfect solution for anyone building simulation-based training solutions for equipment and vehicles".

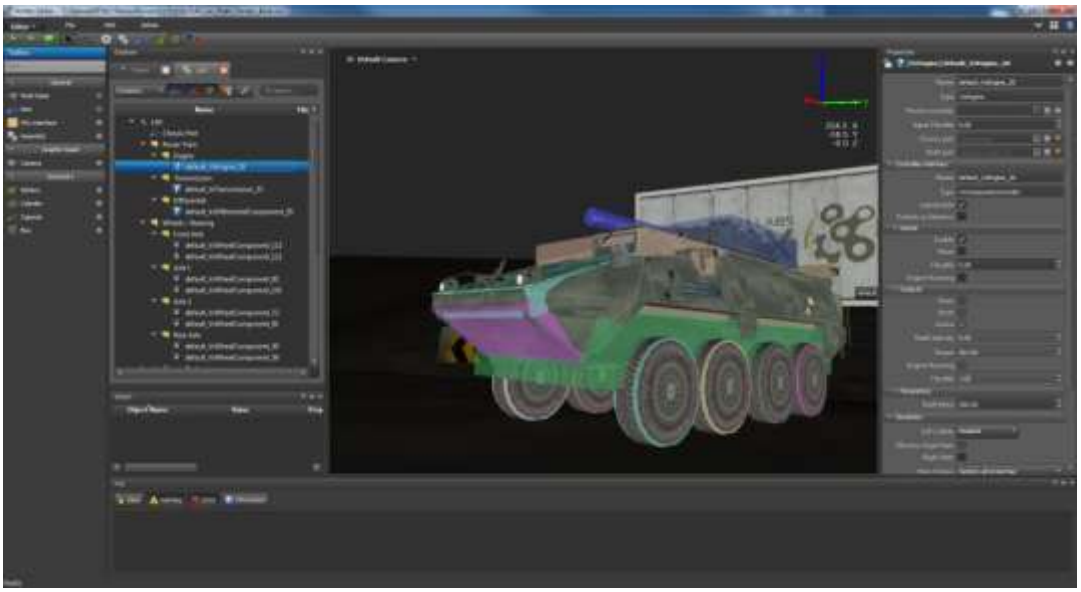
Buy Vortex and Get Your First Vehicle Simulation for Free!

Vortex 5.1 is the ideal time to adopt the leading dynamics simulation toolkit – CMLabs is offering an exclusive promotion until May 31, 2012. With a new purchase of Vortex, you will receive a free prototype (3D model and simulation model) of your vehicle of interest based on your specifications. This free prototype will accelerate the simulation application development by removing the initial design and prototyping phase. The Vortex editor will then allow you to tune and test your model. Vortex will get you there faster and in no time you will be integrating industry leading dynamics for ground vehicles in your application. Speak with a Vortex account manager for more details.

For Vortex 5.1 the following improvements introduce a new paradigm in the way users can deploy Vortex in their training solutions.

These changes impact the way users define dynamics building blocks (mechanisms) for their simulation application by offering a clear and straight forward path from content creation to testing and deploying in application frameworks. Vortex now seamlessly integrates within mechanism-based modular workflow.

VxEditor for mechanisms – Vortex 5.1 deploys a first release of the VxEditor. It is a major step towards making the leading vehicle dynamics and mechanical simulation toolkit available to all simulation engineers without the need for software code development and debugging. The first release of the VxEditor provides test and parameterization capabilities for Vortex mechanisms. It is represents the first step in the deployment of a rich dynamics authoring and debugging environment. The Vortex mechanism architecture allows for easier integration within existing simulation frameworks and makes it possible to develop highly reusable dynamic content for simulation applications. The mechanism architecture combined with the Vortex high-level (VHL) interface allows engineers to easily abstract vehicles and define a structured high-level interface to the vehicle.



The new Vortex mechanism based workflow and VxEditor provides an easy-to-use and highly modular and reusable framework to implement equipment and vehicle dynamics in training applications.

Vortex for Vega Prime 5 – Vortex now supports Vega Prime 5.0. The latest Vortex for Vega Prime module leverages the latest evolutions of these two products and will support the Vortex VxEditor workflow out of the box. Vortex mechanisms can be exported to Vega Prime directly by generating an ACF file (native configuration file from Presagis Vega Prime). This file can then be directly imported in your visualization application through a new Lynx Prime interface. This new workflow allows Vortex driven entities to be loaded and parameterized inside of Lynx Prime. The workflow is much easier and more intuitive.

Vortex VHL Interface – The VHL interface is a simple data-driven interface description language that facilitates communication between mechanisms and other simulation components. The VHL interface acts as an intermediation layer where the interface to a mechanism is exposed. The interface includes all inputs, outputs and parameterization values, and can be defined in code, via scripting, or in the VxEditor. Multiple interfaces may be provided for a single mechanism allowing a systems integrators to expose to the end user only those inputs and parameters that can be safely edited within the verified range of the mechanism. This modularizes and greatly improves the reusability of vehicle dynamics and the simulation of mechanical equipment.

The latest version of Vortex also features dozens of enhancements to improve productivity, solver performance and fidelity. It integrates advanced collision geometry, high-performance material contacts and numerous new friction options. Users can leverage Vortex's new plug-in architecture for integrating their own custom code and run-time applications, while many new source files help them get their projects up and running quickly. Vortex 5.1 also includes much-expanded functionality for vehicles, extensive scenegraph support and improved documentation.

Vortex 5.1 will be shipping to customers in early 2012.



The flexible and powerful Vortex 5.1 puts high-fidelity behaviour in motion for a wide range of vehicles and machinery for prototyping, testing and training purposes.

About CMLabs

CMLabs provides industry-leading physics-based behaviour modeling solutions and services to companies and institutions throughout the real-time visual-simulation world. With a long history in the vis-sim and gaming industries, the Vortex team produces feature-rich simulation tools that set the industry standard for interactive 3D dynamics and simulating mechanical equipment behaviour. Vortex expertise and technology put high-fidelity behaviour in motion in applications for training simulators, mission rehearsal, serious games, virtual prototyping and testing. Vortex customers include Honda, John Deere, L-3, Lockheed Martin, Lego, NASA, Carnegie Mellon University, and over 100 other industry leading companies and educational institutions.

To learn more about Vortex, please visit www.vxsim.com or contact info@vxsim.com.

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