



124.1298.247

# Product Catalog

**PRE**SAGIS

# Creating real world complexity in a virtual one



## OVERVIEW

Presagis delivers simulation and graphics software, and services to defense and aeronautic organizations worldwide. We provide end-users, system integrators, developers, and manufacturers with advanced tools and dedicated services to help them achieve rich, immersive virtual environments, and helping design the cockpits of tomorrow.

Our deep understanding of the defense and aeronautic industries combined with expertise in synthetic environments, simulation & visualization, first-in-class cockpit graphics design tools, and sensors positions us perfectly to meet today's goals and prepare for tomorrow's challenges.

This expertise is what differentiates us from our competition and allows Presagis to respond to a wide array of customers across the globe. The proficiency, knowledge, and real-world experience of our employees across the world grant us a profound understanding of our clients' needs, and the skills to respond to them.

Presagis serves hundreds of customers, including many of the world's most respected organizations such as Boeing, Lockheed Martin, Airbus, BAE Systems, and CAE. By providing industry-leading software and mission- and safety-critical graphics development tools, we have earned the trust of our partners and customers as experts and innovators. Always moving forward, we steadfastly continue to develop our products, invest in our portfolio, and respond to the evolving needs of our clients through research and innovation.



01

## CREATOR

Designed specifically for simulation applications, Creator is the industry-standard software in the creation of optimized 3D models for real-time virtual environments.

Using a rich set of tools, content creators can build models from scratch, edit or import existing ones, and enhance objects for use in sensor-capable simulations. With full control of the modeling process, Creator allows you to quickly generate highly optimized and physically accurate 3D models with varying levels of detail (LOD) and export in a wide variety of formats.



02

## TERRA VISTA

Terra Vista is a terrain modeling software tool that has all of the essential features required for the development of the most sophisticated terrain databases.

Terra Vista not only boasts more import and export capabilities than any other terrain generation software tool on the market, it also supports all major Semi-Automated Forces (SAF) and Computer-Generated Forces (CGF) formats including OneSAF (OTF), CTDB, and JSAF.



# SYNTHETIC ENVIRONMENTS

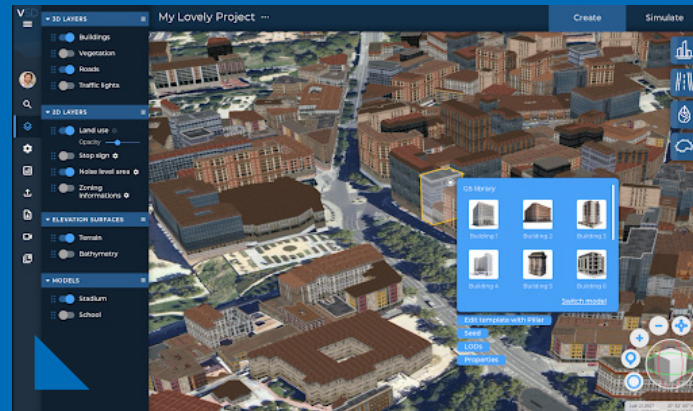




## VELOCITY5D

**VELOCITY5D** provides an automation framework designed to maximize every possible resource – from human, manual processes to highly automate-able and repeatable processes. By combining best-of-breed tools with next-generation architecture, **VELOCITY5D** provides breakthrough performance in geo-localized content management. From 2D to 3D, clients can seamlessly transform diverse GIS data streams into rich, multi-spectral environments, complete with pattern of life, humans, crowds, traffic, interactions, and behaviors.

For use in defense and security applications, **VELOCITY5D** is a new technology and methodology aimed at streamlining and integrating massive amounts of GIS data to produce large, realistic 3D virtual environments. Flexible, cross-platform, and cloud-ready, **VELOCITY5D** offers a way forward for organizations looking for a centralized asset management approach that scales with evolving requirements. By using foundational data, classified information, or a blend, Velocity was designed to layer as much or as little data as required.



SYNTHETIC ENVIRONMENTS



## HELISIM

HeliSIM is the industry-leading high-end COTS for creating high-fidelity, high-quality flight dynamics simulations for virtually any rotary-wing aircraft in the world – military, commercial, or unmanned.

At the core of HeliSIM's distinguished performance lies the real-time flexible blades and gearbox physics simulation. HeliSIM delivers these complex physics through highly optimized processing to simulate a large number of "blade elements" in real time to produce high-fidelity simulation.



## FLIGHTSIM

FlightSIM is the industry-leading high-end COTS for creating high-fidelity, high-quality flight dynamics simulations and systems for virtually any fixed-wing aircraft in the world – military, commercial, or unmanned.

From building and evaluating simulators, training equipment, and cockpits to developing part-task trainers, FlightSIM offers developers fast development times, quick customization, and rapid integration into a given simulation framework.

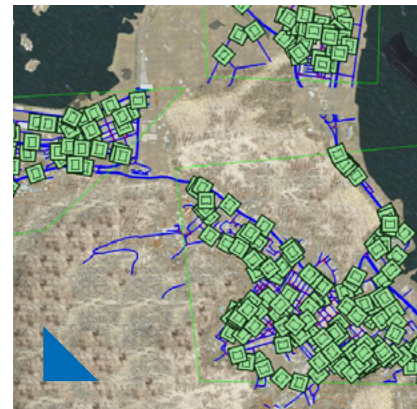


## STAGE

STAGE bring the spark of life to your models, structures, and terrains to create immersive scenarios and rich simulations.

STAGE empowers you to define immersive environments by establishing rules, characteristics, and behaviors and enrich your scenarios by adding interactions, communications, and engagements.

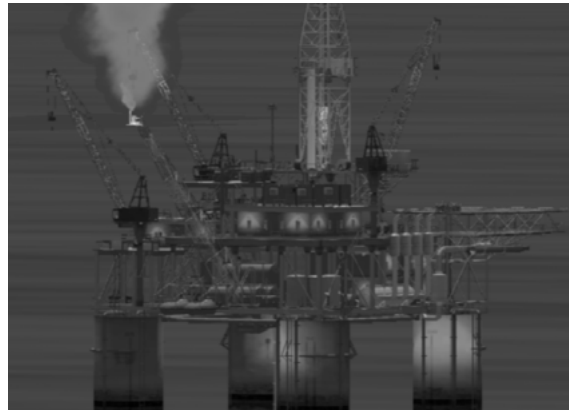
STAGE offers an extendable, standards-based environment that comes complete with tools to help you develop rich scenarios including hundreds of entities out-of-the-box, with built-in doctrines, AI, and 2D & 3D viewing.



**SIMULATION**



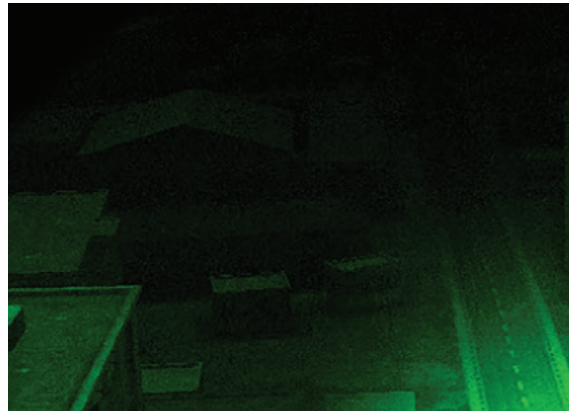
SENSORS



01

ONDULUS IR

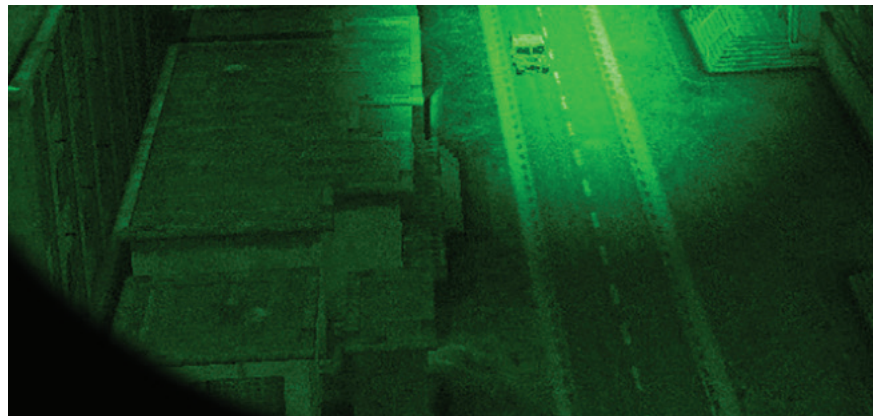
Ondulus IR gives simulations and training scenarios a critical component: physically-based infrared sensors. By adding real-time, high-quality materials-based infrared sensors and sensor views to a simulation environment, you can truly approach the realism needed for research and design, and the immersion required for mission training.



02

ONDULUS NVG

Ondulus NVG is a commercial-of-the-shelf software capable of simulating physics-based night vision in real-time of any electro-optical device that is used to detect visible and infrared energy and provide a visible image.



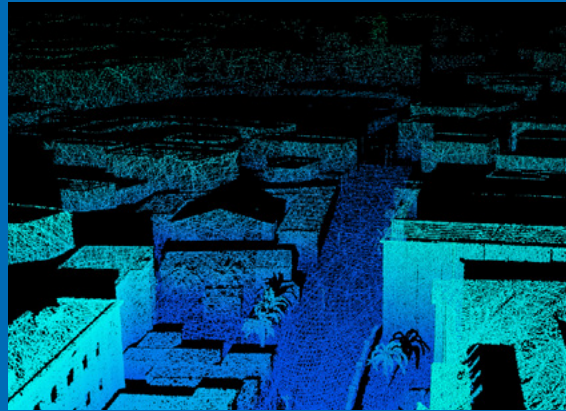
03

**ONDULUS LIDAR**

LiDAR gives simulations and training scenarios a critical component: physics-based infrared sensors.

Ondulus LiDAR is a physics-based LiDAR simulator. The software consists of a LiDAR sensor (the simulator) and a LiDAR viewer.

Simulating scanner or direct laser beam (visible or IR), Ondulus LiDAR was designed to generate a high-quality point clouds that closely resemble the point clouds produced by real LiDAR sensors in terms of density of points as well as their position and intensity.

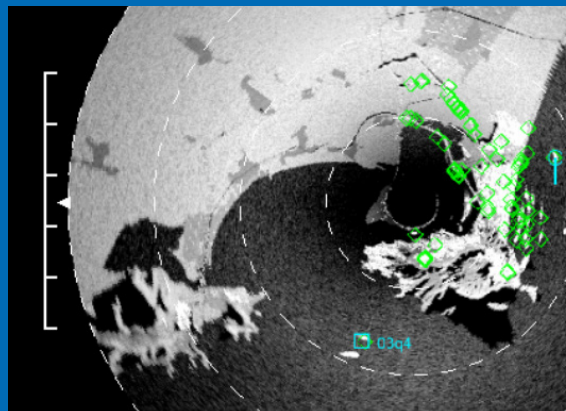


04

**ONDULUS RADAR**

Ondulus Radar delivers the ability to add high-fidelity, high-performance, physics-based radar sensor simulation into a wide variety of research, design, and training applications.

Ondulus Radar users can model and develop their own simulated radar simulations, performance settings, and behaviors associated to common types of manufactured radar.



05

**ONDULUS LLLTV**

Ondulus LLLTV provides physics based simulation of low light level television sensors. The real-time, high-quality materials-based simulation computes the illumination levels measured by cameras sensitive to wavelengths above the normal 'visible' wavelength. Simulating the image intensifier tube (IIT) system and the CCD detector, this modular solution allows you to research, develop, design, teach algorithms, or train operators on these commonly used cameras.

# VISUALIZATION



## VISUALIZATION

### VEGA PRIME

Vega Prime is a comprehensive visualization toolkit that not only lets you create and deploy game-quality visuals and electro-optical sensor views for simulations, but allows you to scale and extend the application to achieve high-density scenes across wide geographic areas in real-time.

Providing an extremely flexible 3D visualization environment, Vega Prime's modular environment lets developers add or modify features, and seamlessly connect, interoperate and synchronize across systems.

### PANORAMA IG

Panorama maximizes performance by leveraging field-proven image generation technology. Quickly installed and easily maintained, Panorama easily integrates to an existing network and is ready to use with minimal configuration.

Employing the latest graphics processors and leveraging Presagis the Vega Prime visualization application, Panorama uses an optimally integrated architecture to ensure very fast graphics at all times.





GRAPHICAL USER INTERFACES



VAPS-XT

VAPS XT offers HMI designers, systems engineers, and embedded engineers maximum control and flexibility for creating interactive real-time graphical displays for avionics and other safety-critical embedded applications.

With an open architecture and integrated logic capabilities, VAPS XT provides the essential features for the design and deployment of certifiable cockpit displays. VAPS XT provides a model-based environment supporting all phases of development from initial concept to embedded deployment. Through a flexible porting structure, VAPS XT applications can be easily deployed to virtually any embedded target with excellent performance.

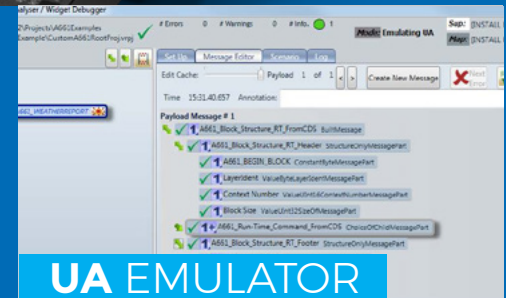
VAPS XT is a complete, object-oriented C++ avionics software development tool for all types of avionics cockpit displays, including ARINC 661. It provides qualifiable code generation for rapid development of DO-178 B/C certifiable software.



UA ACCELERATOR

UA Accelerator is designed to augment your existing modelling tool-sets and software development processes, without requiring fundamental changes or a steep learning curve, eliminating the common concerns around the adoption of a new tool.

UA Accelerator provides a link between graphical development of ARINC 661 layer definition files (widget types, their IDs and other details) and the UA system development process. UA Accelerator synchronizes the graphical model with the system model to eliminate errors of Widget Types, Widget IDs and Layer IDs ensuring consistency between definition file and system design.



UA EMULATOR

UA Emulator helps display and systems developers create tests of any sequence of ARINC 661 messaging to simplify the early detection of problems and reduce the cost of resolving them.

UA Emulator is a powerful, flexible solution designed to work with Presagis VAPS XT 661 and interface to third-party ARINC 661 CDS. Only minimal knowledge of ARINC 661 protocols is required to get up and running. With an intuitive interface designed for rapid message creation and detailed analysis, UA Emulator simplifies the tasks of widget debugging, ARINC 661 traffic log analysis, CDS Layer Design testing, and User Application emulation.

## HELI CRAFT

Built as an effective alternative to traditional ‘hard-coded’ or ‘black-box’ simulators, HELI CRAFT’s unparalleled flexibility means that it can easily be configured for pilot training, “test bench” research, or new product development and design.

Customizable avionics, aerodynamics, weight and balance, hydraulics, engines, weather, and much more, make HELI CRAFT a truly adaptable solution.

Leveraging 35 years of market experience, HELI CRAFT is our adaptable helicopter simulator built to deliver the highest fidelity at the most competitive price.



## UAV CRAFT

The UAV CRAFT customizable Unmanned Aircraft Vehicle (UAV) simulator’s design is based on a robust, modular platform that is capable of evolving as your goals and requirements change.

At the core of UAV CRAFT is a high-performance, high-fidelity simulator that gives customers full control of avionics, aerodynamics, weight and balance, engines, flight control, navigation, payloads, weather, and much more. This unparalleled flexibility means that UAV CRAFT can easily be configured for pilot and payload training, “test bench” research, or new product development and design.



An aerial photograph of a city at sunset. The sky is filled with dramatic, dark clouds illuminated from below by the setting sun, creating a warm orange and red glow. The city below is densely packed with buildings, streets, and green spaces, all bathed in the same warm light. The overall mood is one of vastness and potential.

# PUSHING THE BOUNDARIES OF SIMULATION

# PRESAGIS

WWW.PRESAGIS.COM



## GET IN TOUCH



SCAN HERE  
FOR MORE DETAILS

 @presagis


 @presagis

 Presagis

 **CANADA** +1 514 341 3874

 **FRANCE** +33 1 30 70 50 00

 **ITALY** +39 02 46712 231

 **UK** + 44 (0) 1793 441447

 **USA** +1 407 380 7229