# IData<sup>®</sup> Tool Suite

Significantly reduce aerospace display design, development and certification cost and risk across the entire development lifecycle with the only data-driven HMI tool suite

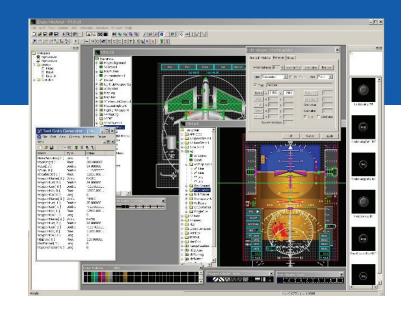


### Advantages

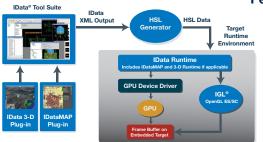
The only data-driven solution for accelerating the creation of mission- and safety-critical embedded display applications on the market! That means the challenges of costly and time-consuming development cycles associated with other code-based solutions are eliminated. Reliably certify once and do away with the need for recertification with every new variable or enhancement. IData provides a robust and flexible development framework to easily design, develop, prototype and deploy rich graphics for any target display application, regardless of platform.

• Reduces Life Cycle Costs – Open architecture model-based development and meets DO-178C certification requirements

IData<sup>®</sup> combines the power of a platform-independent, integrated tool suite with a data-driven open architecture and flexible development framework for easy design, development, prototyping, certification and deployment of any graphics-rich display application.



- Reduces Certification Costs IData DO-178C certification kit eases certification through data-driven architecture that does not require code generators or custom codes
- Offers Robust Performance Optimized for safety-critical embedded targets
- Reduces Effort One integrated toolset that is platform-independent for creating mission- and safety-critical displays
- Reduces Risk DO-178C certifiable

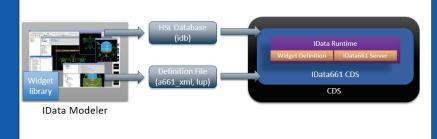


# **Features and Benefits**

- Integrated Tool Suite Offers one integrated toolset including a mapping module for creating mission- and safety-critical displays
- Multi-Touch Cockpit Functionality Supports flight deck customization, interface flexibility and space efficiency to reduce pilot workload and fatigue and meet reduced SWAP requirements by eliminating switches and knobs.
- **OpenGL SC 2.0 Shader-Based Graphics** Maximizes the power of modern graphics programmable shader engines so developers can explore new possibilities in HMI design and performance while meeting industry safety standards and certification.

• 2D/3D Digital Moving Maps – Improves situational awareness in any type of display (synthetic vision, degraded visual environment, terrain warning systems, etc.) with newly upgraded and integrated module of IData Map 2.0. Display designers can design, build and certify customized maps to meet application needs.

- Certifiable to DO-178C Level A Meets the highest Design Assurance Level defined by the FAA.
- Aligned with Industry Standards ARINC661, FACE, Khronos OpenGL ES/ SC, AS9100.
- True Rapid Prototyping No need to reboot, restart or reload the target system; the data produced from the HSL Generator can be overlaid on-the-fly in target system.
- Behavior-Based Animations Assign animation behaviors to each primitive for unique runtime animations.
- Design Once, Deploy to Many The IData Runtime runs on all targets, i.e., embedded, simulator, tablet, etc.



## IData for ARINC 661

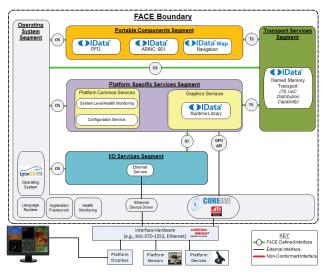
IData supports the ARINC 661 standard with a very robust transport layer and includes the benefits associated with the embedded performance of IData. Both the 661 widgets and ARINC 661 communications can co-exist within the IData architecture, as well as with the safety critical aspects associated with DO-178C design

#### **Advantages**

- Generates ARINC 661 compliant Binary and XML document format (DF)
- Data driven ARINC 661 display development
- Easy to use IData interface to rapidly create ARINC 661 widgets
- Embed a CDS into any IData Layout for full hybrid solution
- Define behavior based ARINC 661 widgets

#### **Features and Benefits**

- ARINC 661 fullduplex CDS/UA Communication Protocol Layer
- Ability for ARINC 661 and non ARINC 661 widgets in same display
- IData 661 simulated Embedded CDS Server
- Internal UA Simulator
- Convert any legacy IData display into an ARINC 661 display
- Simulate: Use the enhanced Test Data Generator as your UA simulator or use the UA runtime interface to integrate with your existing UA applications



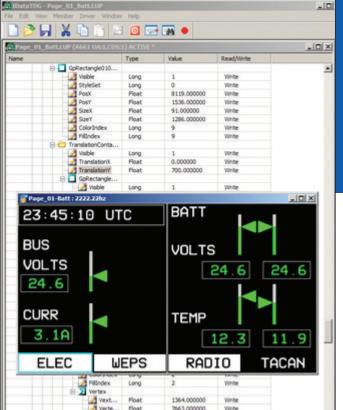
# IData FACE

ENSCO Avionics has teamed up with industry leaders in processing hardware, graphics processing and real-time operating systems to put together a DO-178 certifiable hardware and software stack that is aligned to FACE

Utilizing the IData infrastructure, customers can easily create Portable Component Segments (PCS) which uses the IData Runtime that resides in the Platform Specific Services Segment (PSSS) and will communicate over the Transport Services Segment (TSS) on a FACE aligned stack.



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