

# IData® Tool Suite

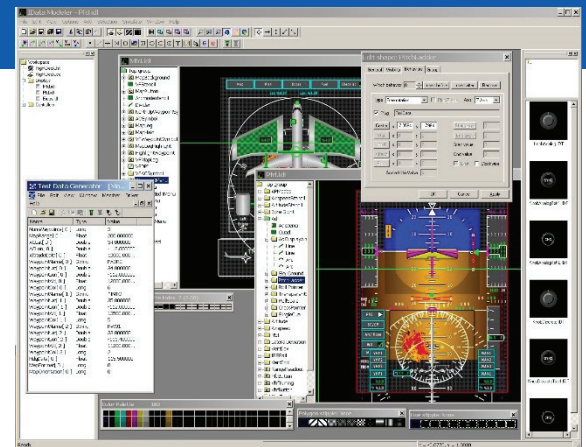
Industry leading SDK for safety-critical embedded applications



A data driven solution for the creation of mission- and safety-critical embedded display applications. IData® provides a robust and flexible development framework to easily design, develop, prototype and deploy rich graphics for any target display application

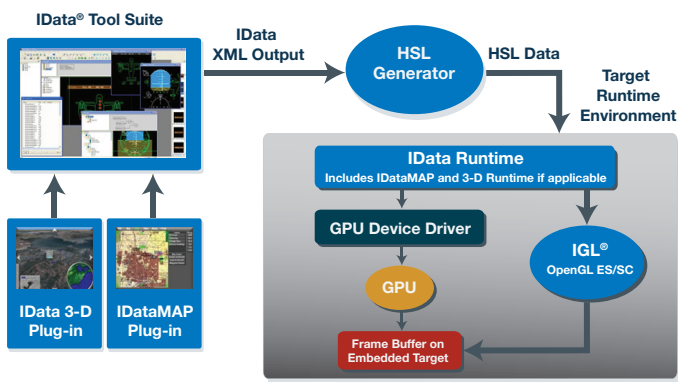
## Advantages

- **Integrated Tool Set** – One integrated toolset for creating mission and safety-critical displays
- **Data Driven Architecture** – Does not rely on the need for code generators or the need for custom code for each target device.
- **Platform Independent** – Deploy your IData application on any target RTOS, processor, or GPU
- **Certifiable to DO-178C Level A** – IData Certification Kit meets the highest Design Assurance Level defined by the FAA.
- **Aligned with Industry Standards** – ARINC661, FACE, Khronos OpenGL ES/SC, AS9100



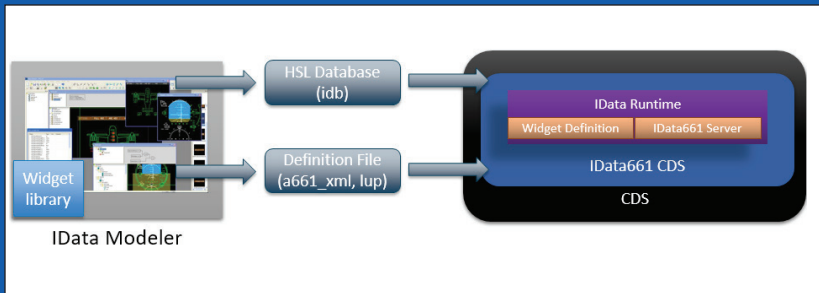
## Features

- **True Rapid Prototyping** – Data produced from the HSL Generator can be overlaid on-the-fly in target system. No need to reboot, restart, or reload the target system
- **Verification Tools** – With HVT, trace the generated HSL data file to high and low level requirements used
- **Behavior Based Animations** – Assign animation behaviors to each primitive for unique runtime animations
- **Advanced Font Capabilities** – Font creation and universal textured fonts allow for endless font capabilities
- **Performance Enablers** – Specify desired refresh rates for specific areas within the display
- **Design Once, Deploy to Many** – The IData Runtime runs on all targets, i.e., embedded, simulator, tablet



## Benefits

- **Delivers Robust Performance** – Easy to meet performance requirements on all classes of embedded hardware with unique functionalities, i.e., multi-rate rendering, separately addressable shapes, and drawing plane interface.
- **Delivers Advanced Capabilities** – Digital mapping, 3-D scene management, video handling, and turnkey reusable widget libraries give developers access to advanced capabilities.
- **Reduces Life Cycle Costs** – Offers integrated, powerful, open architecture model-based development that meets DO-178C certification requirements.
- **Reduce Certification Efforts** – Provides a DO-178C Certification Kit to ease certification process.



## IData for ARINC 661

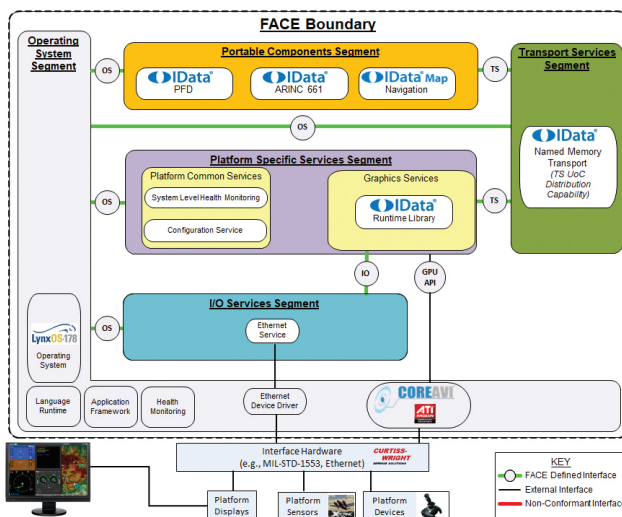
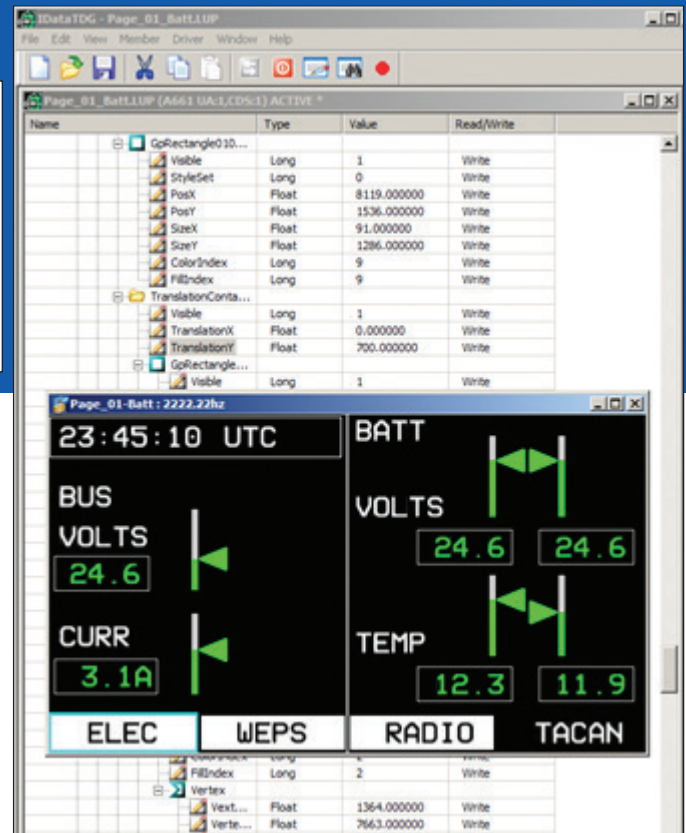
IData supports the ARINC 661 standard with a very robust transport layer and includes the benefits associated with the embedded performance of IData. Both the 661 widgets and ARINC 661 communications can co-exist within the IData architecture, as well as with the safety critical aspects associated with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