



GL Studio[®] Mixed-Criticality[™] Workflow

Develop QM and ASIL content in the same GL Studio Design

The DiSTI Corporation's GL Studio Mixed-Criticality[™] Workflow facilitates both **Safe** and **Non-Safe** User Interface **content** in the same design file with a **unified development workflow process**.



Key Features and Benefits:



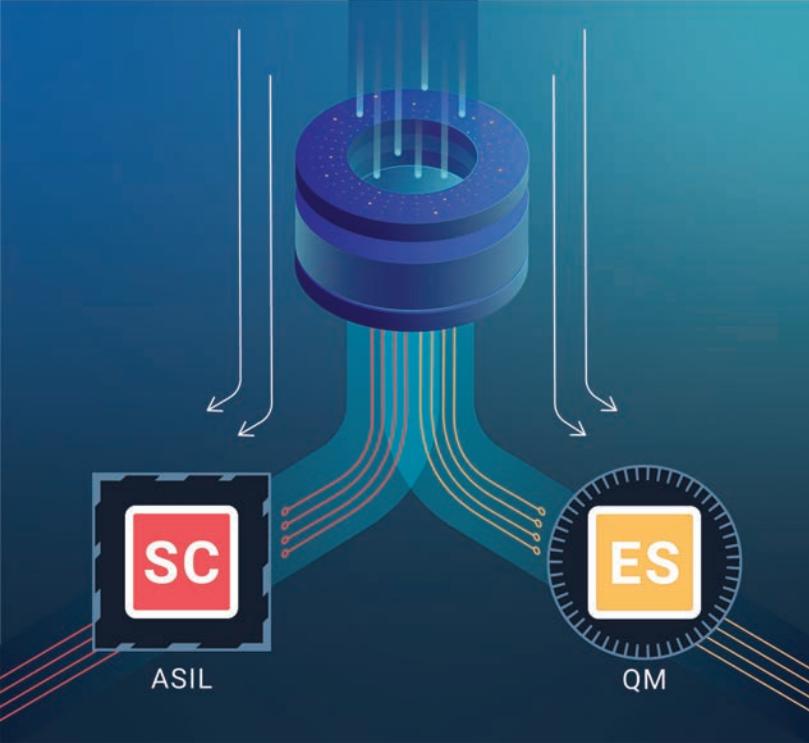
Both GL Studio
Safety-Critical (ASIL) and
Embedded Systems (QM)
content in the same design.



OneTouch Deployment[™]
for **single button rapid generation,**
compilation, content transfer,
and **application launch.**



Visualize User Interface
content on hardware target
without the need for
complex **programming.**



One UI Design, Two Approaches

As a C++ code generator and runtime library, the GL Studio HMI/UI software development tool provides for both **Safety-Critical (SC)** and **Embedded Systems (ES)** content in the same design. This is made possible by our **Mixed-Criticality™** Workflow.

At code generation time, when GL Studio encounters ASIL content, it uses the SC code generator and runtime library for that code. In the next step, GL Studio checks for all non-ASIL content and uses the ES code generator and runtime library for that content. All of this content is then transferred to the hardware target and composited together at runtime.

BENCHMARK STUDIES

Software	Dev time	FPS
GL Studio	10 Hrs	278 Hz 
QT	2 Wks	50 Hz 

*metrics based on independent industry studies

Features

- **Faster** iteration time
- **Prototype directly** on the hardware target
- **Automated** partition of SC and ES content
- **Convenient**, automated OneTouch Deployment™
- **Workflow** source code available for customization throughout project lifecycle

10x Runtime Performance 

*metrics based on independent industry studies

Benefits

- **80% faster** time to market
- **67% faster** target deployment time
- **60% less** CPU utilization
- **Ten times** better runtime performance
- **Lower** lifetime program costs



60 Seconds or Less - Iteration on Target

This process uses **GL Studio's OneTouch Deployment™** to handle the generation, content transfer, and application launch that takes **less than 60 seconds** to iterate. This feature allows for a very rapid iteration cycle. It lets UI design teams visualize their content on the hardware target without the need for complex programming and gives a common platform for implementation engineers to work seamlessly with UI designers.

Why Engineers Prefer GL Studio

Independent industry studies have proven that the GL Studio development workflow yields up to **80% faster development time**. GL Studio's C++ code generation and runtime library method of development boasts up to **10x runtime performance** and 60% less central processing unit (CPU) utilization. GL Studio application sizes out of the box are already **highly optimized**, showing just 10% of the application footprint compared to the leading competitor tools.